



## Technical Report for

### ENSR Consulting & Engineering

Ingersoll Rand, Phillipsburg, NJ

03710-173-0902 PO% 2039287

Accutest Job Number: J30052

Sampling Date: 05/09/06

#### Report to:

ENSR Consulting & Engineering  
20 New England Avenue  
Piscataway, NJ 08854

ATTN: Gregg Micalizio

Total number of pages in report: **104**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese  
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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## Sample Summary

ENSR Consulting & Engineering

Job No: J30052

Ingersoll Rand, Phillipsburg, NJ  
Project No: 03710-173-0902 PO% 2039287

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
J30052-1	05/09/06	10:10 AG	05/09/06	AQ	Ground Water	MW30
J30052-2	05/09/06	11:20 AG	05/09/06	AQ	Ground Water	MW20
J30052-3	05/09/06	13:50 AG	05/09/06	AQ	Ground Water	RW09
J30052-4	05/09/06	15:30 AG	05/09/06	AQ	Ground Water	RW16

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** ENSR Consulting & Engineering

**Job No** J30052

**Site:** Ingersoll Rand, Phillipsburg, NJ

**Report Date** 5/24/2006 3:46:28 PM

4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 05/09/2006 and were received at Accutest on 05/09/2006 properly preserved, at 3.5 Deg. C and intact. These Samples received an Accutest job number of J30052. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GC By Method SW846 8015

<b>Matrix</b> AQ	<b>Batch ID:</b> GII1593
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30029-3DUP, J30154-1DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Ethene are outside control limits for sample J30154-1DUP. RPD acceptable due to low dup and sample concentrations.

### Metals By Method SW846 6010B

<b>Matrix</b> AQ	<b>Batch ID:</b> MP34466
------------------	--------------------------

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30799-2MS, J30799-2MSD, J30799-2SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Iron are outside control limits.

### Wet Chemistry By Method EPA 300/SW846 9056

<b>Matrix</b> AQ	<b>Batch ID:</b> GP33571
------------------	--------------------------

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30351-1DUP, J30351-1MS were used as the QC samples for Chloride, Sulfate.
- RPD(s) for Duplicate for Sulfate are outside control limits for sample GP33571-D1. RPD acceptable due to low duplicate and sample concentrations.

### Wet Chemistry By Method EPA 310.1

<b>Matrix</b> AQ	<b>Batch ID:</b> GN90694
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30154-2DUP were used as the QC samples for Alkalinity, Total as CaCO<sub>3</sub>.

### Wet Chemistry By Method EPA 350.1

**Matrix** AQ **Batch ID:** GP33556

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J29324-1MS, J29324-1DUP were used as the QC samples for Nitrogen, Ammonia.
- RPD(s) for Duplicate for Nitrogen, Ammonia are outside control limits for sample GP33556-D1. RPD acceptable due to low duplicate and sample concentrations.

### Wet Chemistry By Method EPA 353.2

**Matrix** AQ **Batch ID:** GP33562

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30029-1DUP, J30029-1MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

### Wet Chemistry By Method EPA 376.1

**Matrix** AQ **Batch ID:** GN90779

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30126-1DUP, J30126-2MS were used as the QC samples for Sulfide.

### Wet Chemistry By Method EPA353.2/SM4500NO2B

**Matrix** AQ **Batch ID:** R55877

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- J30052-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix** AQ **Batch ID:** R55878

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- J30052-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix** AQ **Batch ID:** R55879

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- J30052-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix** AQ **Batch ID:** R55880

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- J30052-4 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

### Wet Chemistry By Method SM18 3500FED

**Matrix** AQ **Batch ID:** GN90612

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30029-5DUP were used as the QC samples for Iron, Ferrous.

### Wet Chemistry By Method SM18 3500FED M

<b>Matrix</b> AQ	<b>Batch ID:</b> R55893
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- The data for SM18 3500FED M meets quality control requirements.
- J30052-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

<b>Matrix</b> AQ	<b>Batch ID:</b> R55894
------------------	-------------------------

- The data for SM18 3500FED M meets quality control requirements.
- J30052-2 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

<b>Matrix</b> AQ	<b>Batch ID:</b> R55895
------------------	-------------------------

- The data for SM18 3500FED M meets quality control requirements.
- J30052-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

<b>Matrix</b> AQ	<b>Batch ID:</b> R55896
------------------	-------------------------

- The data for SM18 3500FED M meets quality control requirements.
- J30052-4 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

### Wet Chemistry By Method SM18 4500CO2D

<b>Matrix</b> AQ	<b>Batch ID:</b> GN90711
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- The data for SM18 4500CO2D meets quality control requirements.

<b>Matrix</b> AQ	<b>Batch ID:</b> GN90713
------------------	--------------------------

- The data for SM18 4500CO2D meets quality control requirements.

### Wet Chemistry By Method SM18 9215B

<b>Matrix</b> AQ	<b>Batch ID:</b> MB2903
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30017-1DUP were used as the QC samples for Plate Count, Total.

### Wet Chemistry By Method SM19 4500NO2B

<b>Matrix</b> AQ	<b>Batch ID:</b> GN90583
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J30029-6DUP, J30029-6MS were used as the QC samples for Nitrogen, Nitrite.

The Accutest Laboratories of New Jersey certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NJ, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (J30052).



## Sample Results

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## Report of Analysis

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## Report of Analysis

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Client Sample ID: MW30	Date Sampled: 05/09/06
Lab Sample ID: J30052-1	Date Received: 05/09/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8015	
Project: Ingersoll Rand, Phillipsburg, NJ	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II31512.D	1	05/18/06	HSC	n/a	n/a	GII1593
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.10	0.066	ug/l	
74-84-0	Ethane	ND	0.10	0.056	ug/l	
74-85-1	Ethene	ND	0.10	0.075	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MW30	
<b>Lab Sample ID:</b> J30052-1	<b>Date Sampled:</b> 05/09/06
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/09/06
	<b>Percent Solids:</b> n/a
<b>Project:</b> Ingersoll Rand, Phillipsburg, NJ	

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	402	100	ug/l	1	05/19/06	05/20/06 KL	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA17532

(2) Prep QC Batch: MP34466

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RL = Reporting Limit

# Report of Analysis

Client Sample ID: MW30	Date Sampled: 05/09/06
Lab Sample ID: J30052-1	Date Received: 05/09/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Ingersoll Rand, Phillipsburg, NJ	

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	155	5.0	mg/l	1	05/12/06	JA	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	05/12/06	JA	SM18 4500CO2D
Alkalinity, Total as CaCO3	155	5.0	mg/l	1	05/12/06	KD	EPA 310.1
Chloride	59.4	2.0	mg/l	1	05/23/06 02:52	JH	EPA 300/SW846 9056
Iron, Ferric <sup>a</sup>	0.40	0.30	mg/l	1	05/20/06 19:36	KL	SM18 3500FED M
Iron, Ferrous	< 0.20	0.20	mg/l	1	05/10/06 17:14	NP	SM18 3500FED
Nitrogen, Ammonia	< 0.10	0.10	mg/l	1	05/23/06 13:22	NR	EPA 350.1
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	05/22/06 13:29	LE	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	05/22/06 13:29	LE	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	05/10/06 11:35	NP	SM19 4500NO2B
Plate Count, Total	300	100	CFU/ml	100	05/10/06 08:40	MJC	SM18 9215B
Sulfate	39.6	2.0	mg/l	1	05/23/06 02:52	JH	EPA 300/SW846 9056
Sulfide	< 2.0	2.0	mg/l	1	05/15/06	ST	EPA 376.1

(a) Calculated as: (Iron) - (Iron, Ferrous)

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

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## Report of Analysis

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Client Sample ID: MW20	Date Sampled: 05/09/06
Lab Sample ID: J30052-2	Date Received: 05/09/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8015	
Project: Ingersoll Rand, Phillipsburg, NJ	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II31513.D	1	05/18/06	HSC	n/a	n/a	GII1593
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	767	0.10	0.066	ug/l	
74-84-0	Ethane	ND	0.10	0.056	ug/l	
74-85-1	Ethene	ND	0.10	0.075	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MW20	
<b>Lab Sample ID:</b> J30052-2	<b>Date Sampled:</b> 05/09/06
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/09/06
	<b>Percent Solids:</b> n/a
<b>Project:</b> Ingersoll Rand, Phillipsburg, NJ	

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	6350	100	ug/l	1	05/19/06	05/20/06 KL	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA17532

(2) Prep QC Batch: MP34466

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RL = Reporting Limit

# Report of Analysis

Client Sample ID: MW20	Date Sampled: 05/09/06
Lab Sample ID: J30052-2	Date Received: 05/09/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Ingersoll Rand, Phillipsburg, NJ	

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	323	5.0	mg/l	1	05/12/06	JA	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	05/12/06	JA	SM18 4500CO2D
Alkalinity, Total as CaCO3	324	5.0	mg/l	1	05/12/06	KD	EPA 310.1
Chloride	12.7	2.0	mg/l	1	05/23/06 03:11	JH	EPA 300/SW846 9056
Iron, Ferric <sup>a</sup>	6.4	0.30	mg/l	1	05/20/06 19:41	KL	SM18 3500FED M
Iron, Ferrous	< 0.20	0.20	mg/l	1	05/10/06 17:14	NP	SM18 3500FED
Nitrogen, Ammonia	< 0.10	0.10	mg/l	1	05/23/06 12:48	NR	EPA 350.1
Nitrogen, Nitrate <sup>b</sup>	0.14	0.11	mg/l	1	05/22/06 13:30	LE	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.14	0.10	mg/l	1	05/22/06 13:30	LE	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	05/10/06 11:35	NP	SM19 4500NO2B
Plate Count, Total	100	100	CFU/ml	100	05/10/06 08:40	MJC	SM18 9215B
Sulfate	11.3	2.0	mg/l	1	05/23/06 03:11	JH	EPA 300/SW846 9056
Sulfide	< 2.0	2.0	mg/l	1	05/15/06	ST	EPA 376.1

(a) Calculated as: (Iron) - (Iron, Ferrous)

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

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# Report of Analysis

<b>Client Sample ID:</b> RW09		
<b>Lab Sample ID:</b> J30052-3		<b>Date Sampled:</b> 05/09/06
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 05/09/06
<b>Method:</b> SW846 8015		<b>Percent Solids:</b> n/a
<b>Project:</b> Ingersoll Rand, Phillipsburg, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II31514.D	1	05/18/06	HSC	n/a	n/a	GII1593
Run #2	II31515.D	5	05/18/06	HSC	n/a	n/a	GII1593

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	8330 <sup>a</sup>	0.50	0.33	ug/l	
74-84-0	Ethane	4.0	0.10	0.056	ug/l	
74-85-1	Ethene	0.94	0.10	0.075	ug/l	

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> RW09	<b>Date Sampled:</b> 05/09/06
<b>Lab Sample ID:</b> J30052-3	<b>Date Received:</b> 05/09/06
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Ingersoll Rand, Phillipsburg, NJ	

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	4280	100	ug/l	1	05/19/06	05/20/06 KL	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA17532

(2) Prep QC Batch: MP34466

---

RL = Reporting Limit

# Report of Analysis

Client Sample ID: RW09	Date Sampled: 05/09/06
Lab Sample ID: J30052-3	Date Received: 05/09/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Ingersoll Rand, Phillipsburg, NJ	

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	283	5.0	mg/l	1	05/12/06	JA	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	05/12/06	JA	SM18 4500CO2D
Alkalinity, Total as CaCO3	283	5.0	mg/l	1	05/12/06	KD	EPA 310.1
Chloride	98.3	2.0	mg/l	1	05/23/06 03:29	JH	EPA 300/SW846 9056
Iron, Ferric <sup>a</sup>	4.3	0.30	mg/l	1	05/20/06 19:46	KL	SM18 3500FED M
Iron, Ferrous	< 0.20	0.20	mg/l	1	05/10/06 17:20	NP	SM18 3500FED
Nitrogen, Ammonia	0.38	0.10	mg/l	1	05/23/06 12:55	NR	EPA 350.1
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	05/22/06 13:33	LE	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	05/22/06 13:33	LE	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	05/10/06 11:35	NP	SM19 4500NO2B
Plate Count, Total	1500	100	CFU/ml	100	05/10/06 08:40	MJC	SM18 9215B
Sulfate	< 2.0	2.0	mg/l	1	05/23/06 03:29	JH	EPA 300/SW846 9056
Sulfide	< 2.0	2.0	mg/l	1	05/15/06	ST	EPA 376.1

(a) Calculated as: (Iron) - (Iron, Ferrous)

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Accutest Laboratories

# Report of Analysis

3.4  
3

<b>Client Sample ID:</b> RW16		
<b>Lab Sample ID:</b> J30052-4		<b>Date Sampled:</b> 05/09/06
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 05/09/06
<b>Method:</b> SW846 8015		<b>Percent Solids:</b> n/a
<b>Project:</b> Ingersoll Rand, Phillipsburg, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II31516.D	1	05/18/06	HSC	n/a	n/a	GII1593
Run #2	II31517.D	5	05/18/06	HSC	n/a	n/a	GII1593

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	8540 <sup>a</sup>	0.50	0.33	ug/l	
74-84-0	Ethane	20.1	0.10	0.056	ug/l	
74-85-1	Ethene	2.8	0.10	0.075	ug/l	

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> RW16	<b>Date Sampled:</b> 05/09/06
<b>Lab Sample ID:</b> J30052-4	<b>Date Received:</b> 05/09/06
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Ingersoll Rand, Phillipsburg, NJ	

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	9790	100	ug/l	1	05/19/06	05/20/06 KL	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA17532

(2) Prep QC Batch: MP34466

---

RL = Reporting Limit

# Report of Analysis

Client Sample ID: RW16	Date Sampled: 05/09/06
Lab Sample ID: J30052-4	Date Received: 05/09/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Ingersoll Rand, Phillipsburg, NJ	

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	448	5.0	mg/l	1	05/12/06	JA	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	05/12/06	JA	SM18 4500CO2D
Alkalinity, Total as CaCO3	449	10	mg/l	1	05/12/06	KD	EPA 310.1
Chloride	245	2.0	mg/l	1	05/23/06 03:48	JH	EPA 300/SW846 9056
Iron, Ferric <sup>a</sup>	7.8	0.30	mg/l	1	05/20/06 20:03	KL	SM18 3500FED M
Iron, Ferrous	2.0	0.20	mg/l	1	05/10/06 17:20	NP	SM18 3500FED
Nitrogen, Ammonia	0.96	0.10	mg/l	1	05/23/06 12:56	NR	EPA 350.1
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	05/22/06 13:34	LE	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	05/22/06 13:34	LE	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	05/10/06 11:35	NP	SM19 4500NO2B
Plate Count, Total	2900	100	CFU/ml	100	05/10/06 08:40	MJC	SM18 9215B
Sulfate	< 2.0	2.0	mg/l	1	05/23/06 03:48	JH	EPA 300/SW846 9056
Sulfide	< 2.0	2.0	mg/l	1	05/15/06	ST	EPA 376.1

(a) Calculated as: (Iron) - (Iron, Ferrous)

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit



## Misc. Forms

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### Custody Documents and Other Forms

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**Includes the following where applicable:**

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



**Job Change Order:** J30052\_5/10/2006

<b>Requested Date:</b>	5/10/2006	<b>Received Date:</b>	5/9/2006
<b>Account Name:</b>	ENSR Consulting & Engineering	<b>Due Date:</b>	5/23/2006
<b>Project Description:</b>	Ingersoll Rand, Phillipsburg, NJ	<b>Deliverable:</b>	REDT2
<b>CSR:</b>	MV	<b>TAT (Days):</b>	14
<b>Sample #:</b>	J30052-All	<b>Change:</b>	Cancel PM13

4.1  
4

**Above Changes Per:** Gregg

**Date:** 5/10/2006

**J30052: Chain of Custody**  
**Page 2 of 2**

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

## Internal Sample Tracking Chronicle

ENSR Consulting & Engineering

Job No: J30052

Ingersoll Rand, Phillipsburg, NJ  
 Project No: 03710-173-0902 PO% 2039287

4.2  
4

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
<b>J30052-1 Collected: 09-MAY-06 10:10 By: AG Received: 09-MAY-06 By: MPC</b>						
<b>MW30</b>						
J30052-1	SM18 9215B	10-MAY-06 08:40	MJC			TPC
J30052-1	SM19 4500NO2B	10-MAY-06 11:35	NP			NO2
J30052-1	SM18 3500FED	10-MAY-06 17:14	NP			FE2
J30052-1	EPA 310.1	12-MAY-06	KD			ALK
J30052-1	SM18 4500CO2D	12-MAY-06	JA			BIC,CAR
J30052-1	SM18 4500CO2D	12-MAY-06	JA			BIC,CAR
J30052-1	EPA 376.1	15-MAY-06	ST			S
J30052-1	SW846 8015	18-MAY-06 11:29	HSC			V8015DGMEE
J30052-1	SW846 6010B	20-MAY-06 19:36	KL	19-MAY-06	JW	FE
J30052-1	SM18 3500FED M	20-MAY-06 19:36	KL			FE3
J30052-1	EPA 353.2	22-MAY-06 13:29	LE	22-MAY-06	LE	NO32
J30052-1	EPA353.2/SM4500NO2B	22-MAY-06 13:29	LE			NO30
J30052-1	EPA 300/SW846 9056	23-MAY-06 02:52	JH	22-MAY-06	JH	CHL,SO4
J30052-1	EPA 350.1	23-MAY-06 13:22	NR	22-MAY-06	MM	AMN
<b>J30052-2 Collected: 09-MAY-06 11:20 By: AG Received: 09-MAY-06 By: MPC</b>						
<b>MW20</b>						
J30052-2	SM18 9215B	10-MAY-06 08:40	MJC			TPC
J30052-2	SM19 4500NO2B	10-MAY-06 11:35	NP			NO2
J30052-2	SM18 3500FED	10-MAY-06 17:14	NP			FE2
J30052-2	EPA 310.1	12-MAY-06	KD			ALK
J30052-2	SM18 4500CO2D	12-MAY-06	JA			BIC,CAR
J30052-2	SM18 4500CO2D	12-MAY-06	JA			BIC,CAR
J30052-2	EPA 376.1	15-MAY-06	ST			S
J30052-2	SW846 8015	18-MAY-06 11:42	HSC			V8015DGMEE
J30052-2	SW846 6010B	20-MAY-06 19:41	KL	19-MAY-06	JW	FE
J30052-2	SM18 3500FED M	20-MAY-06 19:41	KL			FE3
J30052-2	EPA 353.2	22-MAY-06 13:30	LE	22-MAY-06	LE	NO32
J30052-2	EPA353.2/SM4500NO2B	22-MAY-06 13:30	LE			NO30
J30052-2	EPA 300/SW846 9056	23-MAY-06 03:11	JH	22-MAY-06	JH	CHL,SO4
J30052-2	EPA 350.1	23-MAY-06 12:48	NR	21-MAY-06	NP	AMN
<b>J30052-3 Collected: 09-MAY-06 13:50 By: AG Received: 09-MAY-06 By: MPC</b>						
<b>RW09</b>						
J30052-3	SM18 9215B	10-MAY-06 08:40	MJC			TPC

### Internal Sample Tracking Chronicle

ENSR Consulting & Engineering

Job No: J30052

Ingersoll Rand, Phillipsburg, NJ  
 Project No: 03710-173-0902 PO% 2039287

4.2  
4

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
J30052-3	SM19 4500NO2B	10-MAY-06 11:35	NP			NO2
J30052-3	SM18 3500FED	10-MAY-06 17:20	NP			FE2
J30052-3	EPA 310.1	12-MAY-06	KD			ALK
J30052-3	SM18 4500CO2D	12-MAY-06	JA			BIC,CAR
J30052-3	SM18 4500CO2D	12-MAY-06	JA			BIC,CAR
J30052-3	EPA 376.1	15-MAY-06	ST			S
J30052-3	SW846 8015	18-MAY-06 11:55	HSC			V8015DGMEE
J30052-3	SW846 8015	18-MAY-06 12:10	HSC			V8015DGMEE
J30052-3	SW846 6010B	20-MAY-06 19:46	KL	19-MAY-06	JW	FE
J30052-3	SM18 3500FED M	20-MAY-06 19:46	KL			FE3
J30052-3	EPA 353.2	22-MAY-06 13:33	LE	22-MAY-06	LE	NO32
J30052-3	EPA353.2/SM4500NO2B	22-MAY-06 13:33	LE			NO30
J30052-3	EPA 300/SW846 9056	23-MAY-06 03:29	JH	22-MAY-06	JH	CHL,SO4
J30052-3	EPA 350.1	23-MAY-06 12:55	NR	22-MAY-06	MM	AMN

J30052-4 Collected: 09-MAY-06 15:30 By: AG Received: 09-MAY-06 By: MPC  
 RW16

J30052-4	SM18 9215B	10-MAY-06 08:40	MJC			TPC
J30052-4	SM19 4500NO2B	10-MAY-06 11:35	NP			NO2
J30052-4	SM18 3500FED	10-MAY-06 17:20	NP			FE2
J30052-4	EPA 310.1	12-MAY-06	KD			ALK
J30052-4	SM18 4500CO2D	12-MAY-06	JA			BIC,CAR
J30052-4	SM18 4500CO2D	12-MAY-06	JA			BIC,CAR
J30052-4	EPA 376.1	15-MAY-06	ST			S
J30052-4	SW846 8015	18-MAY-06 12:25	HSC			V8015DGMEE
J30052-4	SW846 8015	18-MAY-06 12:56	HSC			V8015DGMEE
J30052-4	SW846 6010B	20-MAY-06 20:03	KL	19-MAY-06	JW	FE
J30052-4	SM18 3500FED M	20-MAY-06 20:03	KL			FE3
J30052-4	EPA 353.2	22-MAY-06 13:34	LE	22-MAY-06	LE	NO32
J30052-4	EPA353.2/SM4500NO2B	22-MAY-06 13:34	LE			NO30
J30052-4	EPA 300/SW846 9056	23-MAY-06 03:48	JH	22-MAY-06	JH	CHL,SO4
J30052-4	EPA 350.1	23-MAY-06 12:56	NR	22-MAY-06	MM	AMN

# Accutest Internal Chain of Custody

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ  
 Received: 05/09/06

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
J30052-1.1	Secured Storage	Todd Shoemaker	05/10/06 08:29	Retrieve from Storage
J30052-1.1	Todd Shoemaker	Nikul Patel	05/10/06 08:43	Custody Transfer
J30052-1.1	Nikul Patel	Secured Storage	05/10/06 17:46	Return to Storage
J30052-1.1	Secured Storage	Todd Shoemaker	05/12/06 08:39	Retrieve from Storage
J30052-1.1	Todd Shoemaker	Katherine DAngelo	05/12/06 08:40	Custody Transfer
J30052-1.1	Katherine DAngelo	Secured Storage	05/12/06 16:47	Return to Storage
J30052-1.1	Secured Storage	Todd Shoemaker	05/22/06 11:30	Retrieve from Storage
J30052-1.1	Todd Shoemaker	Jasmine Heddish	05/22/06 11:33	Custody Transfer
J30052-1.1	Jasmine Heddish	Secured Storage	05/22/06 16:21	Return to Storage
J30052-1.2	Secured Storage	Todd Shoemaker	05/19/06 08:14	Retrieve from Storage
J30052-1.2	Todd Shoemaker	Jieyu Wang	05/19/06 08:17	Custody Transfer
J30052-1.2	Jieyu Wang	Tatiana Pidgainy	05/19/06 11:52	Custody Transfer
J30052-1.2	Tatiana Pidgainy	Secured Storage	05/19/06 16:42	Return to Storage
J30052-1.2.1	Tatiana Pidgainy	Metals Digestion	05/19/06 12:06	Digestate from J30052-1.2
J30052-1.2.1	Metals Digestion	Jieyu Wang	05/19/06 14:46	Digestate from J30052-1.2
J30052-1.2.1	Jieyu Wang	Metals Digestate Storage	05/19/06 14:46	Return to Storage
J30052-1.2.1	Metals Digestate Storage	Kathy Lukenda	05/20/06 08:13	Retrieve from Storage
J30052-1.2.1	Kathy Lukenda	Metals Digestate Storage	05/20/06 14:38	Return to Storage
J30052-1.4	Secured Storage	Todd Shoemaker	05/22/06 09:11	Retrieve from Storage
J30052-1.4	Todd Shoemaker	Laura Earomirski	05/22/06 09:13	Custody Transfer
J30052-1.4	Laura Earomirski	Secured Storage	05/22/06 17:06	Return to Storage
J30052-1.4	Secured Storage	Mel Magallon	05/22/06 18:06	Retrieve from Storage
J30052-1.4	Mel Magallon	Secured Storage	05/23/06 00:53	Return to Storage
J30052-1.5	Secured Storage	Todd Shoemaker	05/15/06 09:09	Retrieve from Storage
J30052-1.5	Todd Shoemaker	Sarvadaman Tripathi	05/15/06 09:10	Custody Transfer
J30052-1.5	Sarvadaman Tripathi	Secured Storage	05/15/06 16:31	Return to Storage
J30052-1.6	Secured Storage	Todd Shoemaker	05/15/06 09:09	Retrieve from Storage
J30052-1.6	Todd Shoemaker	Sarvadaman Tripathi	05/15/06 09:10	Custody Transfer
J30052-1.6	Sarvadaman Tripathi		05/15/06 12:42	Depleted
J30052-1.7	Secured Storage	Todd Shoemaker	05/12/06 08:39	Retrieve from Storage
J30052-1.7	Todd Shoemaker	Katherine DAngelo	05/12/06 08:40	Custody Transfer
J30052-1.7	Katherine DAngelo	Secured Storage	05/12/06 16:47	Return to Storage
J30052-1.8	Secured Storage	Matthew J. Chatten	05/10/06 08:18	Retrieve from Storage
J30052-1.8	Matthew J. Chatten		05/10/06 08:23	Depleted
J30052-1.10	Secured Storage	Huasheng Chen	05/18/06 09:23	Retrieve from Storage
J30052-1.10	Huasheng Chen	GCII	05/18/06 09:23	Load on Instrument

# Accutest Internal Chain of Custody

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ  
 Received: 05/09/06

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
J30052-1.10	GCH	Huasheng Chen	05/19/06 08:19	Unload from Instrument
J30052-1.10	Huasheng Chen	Secured Storage	05/19/06 08:19	Return to Storage
J30052-2.1	Secured Storage	Todd Shoemaker	05/10/06 08:29	Retrieve from Storage
J30052-2.1	Todd Shoemaker	Nikul Patel	05/10/06 08:43	Custody Transfer
J30052-2.1	Nikul Patel	Secured Storage	05/10/06 17:46	Return to Storage
J30052-2.1	Secured Storage	Todd Shoemaker	05/12/06 08:39	Retrieve from Storage
J30052-2.1	Todd Shoemaker	Katherine DAngelo	05/12/06 08:40	Custody Transfer
J30052-2.1	Katherine DAngelo	Secured Storage	05/12/06 16:47	Return to Storage
J30052-2.1	Secured Storage	Todd Shoemaker	05/22/06 11:30	Retrieve from Storage
J30052-2.1	Todd Shoemaker	Jasmine Heddish	05/22/06 11:33	Custody Transfer
J30052-2.1	Jasmine Heddish	Secured Storage	05/22/06 16:21	Return to Storage
J30052-2.2	Secured Storage	Todd Shoemaker	05/19/06 08:14	Retrieve from Storage
J30052-2.2	Todd Shoemaker	Jieyu Wang	05/19/06 08:17	Custody Transfer
J30052-2.2	Jieyu Wang	Tatiana Pidgainy	05/19/06 11:52	Custody Transfer
J30052-2.2	Tatiana Pidgainy	Secured Storage	05/19/06 16:42	Return to Storage
J30052-2.2.1	Tatiana Pidgainy	Metals Digestion	05/19/06 12:06	Digestate from J30052-2.2
J30052-2.2.1	Metals Digestion	Jieyu Wang	05/19/06 14:46	Digestate from J30052-2.2
J30052-2.2.1	Jieyu Wang	Metals Digestate Storage	05/19/06 14:46	Return to Storage
J30052-2.2.1	Metals Digestate Storage	Kathy Lukenda	05/20/06 08:13	Retrieve from Storage
J30052-2.2.1	Kathy Lukenda	Metals Digestate Storage	05/20/06 14:38	Return to Storage
J30052-2.4	Secured Storage	Todd Shoemaker	05/22/06 09:11	Retrieve from Storage
J30052-2.4	Todd Shoemaker	Laura Earomirski	05/22/06 09:13	Custody Transfer
J30052-2.4	Laura Earomirski	Secured Storage	05/22/06 17:06	Return to Storage
J30052-2.4	Secured Storage	Mel Magallon	05/22/06 18:06	Retrieve from Storage
J30052-2.4	Mel Magallon	Secured Storage	05/23/06 00:53	Return to Storage
J30052-2.5	Secured Storage	Todd Shoemaker	05/15/06 09:09	Retrieve from Storage
J30052-2.5	Todd Shoemaker	Sarvadaman Tripathi	05/15/06 09:10	Custody Transfer
J30052-2.5	Sarvadaman Tripathi	Secured Storage	05/15/06 16:31	Return to Storage
J30052-2.6	Secured Storage	Todd Shoemaker	05/15/06 09:09	Retrieve from Storage
J30052-2.6	Todd Shoemaker	Sarvadaman Tripathi	05/15/06 09:10	Custody Transfer
J30052-2.6	Sarvadaman Tripathi		05/15/06 12:42	Depleted
J30052-2.7	Secured Storage	Todd Shoemaker	05/12/06 08:39	Retrieve from Storage
J30052-2.7	Todd Shoemaker	Katherine DAngelo	05/12/06 08:40	Custody Transfer
J30052-2.7	Katherine DAngelo	Secured Storage	05/12/06 16:47	Return to Storage
J30052-2.8	Secured Storage	Matthew J. Chatten	05/10/06 08:18	Retrieve from Storage
J30052-2.8	Matthew J. Chatten		05/10/06 08:23	Depleted

# Accutest Internal Chain of Custody

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ  
 Received: 05/09/06

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
J30052-2.10	Secured Storage	Huasheng Chen	05/18/06 09:23	Retrieve from Storage
J30052-2.10	Huasheng Chen	GCII	05/18/06 09:23	Load on Instrument
J30052-2.10	GCII	Huasheng Chen	05/19/06 08:19	Unload from Instrument
J30052-2.10	Huasheng Chen	Secured Storage	05/19/06 08:19	Return to Storage
J30052-3.1	Secured Storage	Todd Shoemaker	05/10/06 08:29	Retrieve from Storage
J30052-3.1	Todd Shoemaker	Nikul Patel	05/10/06 08:43	Custody Transfer
J30052-3.1	Nikul Patel	Secured Storage	05/10/06 17:46	Return to Storage
J30052-3.1	Secured Storage	Todd Shoemaker	05/12/06 08:39	Retrieve from Storage
J30052-3.1	Todd Shoemaker	Katherine DAngelo	05/12/06 08:40	Custody Transfer
J30052-3.1	Katherine DAngelo	Secured Storage	05/12/06 16:47	Return to Storage
J30052-3.1	Secured Storage	Todd Shoemaker	05/22/06 11:30	Retrieve from Storage
J30052-3.1	Todd Shoemaker	Jasmine Heddish	05/22/06 11:33	Custody Transfer
J30052-3.1	Jasmine Heddish	Secured Storage	05/22/06 16:21	Return to Storage
J30052-3.2	Secured Storage	Todd Shoemaker	05/19/06 08:14	Retrieve from Storage
J30052-3.2	Todd Shoemaker	Jieyu Wang	05/19/06 08:17	Custody Transfer
J30052-3.2	Jieyu Wang	Tatiana Pidgainy	05/19/06 11:52	Custody Transfer
J30052-3.2	Tatiana Pidgainy	Secured Storage	05/19/06 16:42	Return to Storage
J30052-3.2.1	Tatiana Pidgainy	Metals Digestion	05/19/06 12:06	Digestate from J30052-3.2
J30052-3.2.1	Metals Digestion	Jieyu Wang	05/19/06 14:46	Digestate from J30052-3.2
J30052-3.2.1	Jieyu Wang	Metals Digestate Storage	05/19/06 14:46	Return to Storage
J30052-3.2.1	Metals Digestate Storage	Kathy Lukenda	05/20/06 08:13	Retrieve from Storage
J30052-3.2.1	Kathy Lukenda	Metals Digestate Storage	05/20/06 14:38	Return to Storage
J30052-3.4	Secured Storage	Todd Shoemaker	05/22/06 09:11	Retrieve from Storage
J30052-3.4	Todd Shoemaker	Laura Earomirski	05/22/06 09:13	Custody Transfer
J30052-3.4	Laura Earomirski	Secured Storage	05/22/06 17:06	Return to Storage
J30052-3.4	Secured Storage	Mel Magallon	05/22/06 18:06	Retrieve from Storage
J30052-3.4	Mel Magallon	Secured Storage	05/23/06 00:53	Return to Storage
J30052-3.5	Secured Storage	Todd Shoemaker	05/15/06 09:09	Retrieve from Storage
J30052-3.5	Todd Shoemaker	Sarvadaman Tripathi	05/15/06 09:10	Custody Transfer
J30052-3.5	Sarvadaman Tripathi	Secured Storage	05/15/06 16:31	Return to Storage
J30052-3.6	Secured Storage	Todd Shoemaker	05/15/06 09:09	Retrieve from Storage
J30052-3.6	Todd Shoemaker	Sarvadaman Tripathi	05/15/06 09:10	Custody Transfer
J30052-3.6	Sarvadaman Tripathi		05/15/06 12:42	Depleted
J30052-3.7	Secured Storage	Todd Shoemaker	05/12/06 08:39	Retrieve from Storage
J30052-3.7	Todd Shoemaker	Katherine DAngelo	05/12/06 08:40	Custody Transfer
J30052-3.7	Katherine DAngelo	Secured Storage	05/12/06 16:47	Return to Storage

# Accutest Internal Chain of Custody

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ  
 Received: 05/09/06

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
J30052-3.8	Secured Storage	Matthew J. Chatten	05/10/06 08:18	Retrieve from Storage
J30052-3.8	Matthew J. Chatten		05/10/06 08:23	Depleted
J30052-3.10	Secured Storage	Huasheng Chen	05/18/06 09:23	Retrieve from Storage
J30052-3.10	Huasheng Chen	GCII	05/18/06 09:23	Load on Instrument
J30052-3.10	GCII	Huasheng Chen	05/19/06 08:19	Unload from Instrument
J30052-3.10	Huasheng Chen	Secured Storage	05/19/06 08:19	Return to Storage
J30052-4.1	Secured Storage	Todd Shoemaker	05/10/06 08:29	Retrieve from Storage
J30052-4.1	Todd Shoemaker	Nikul Patel	05/10/06 08:43	Custody Transfer
J30052-4.1	Nikul Patel	Secured Storage	05/10/06 17:46	Return to Storage
J30052-4.1	Secured Storage	Todd Shoemaker	05/12/06 08:39	Retrieve from Storage
J30052-4.1	Todd Shoemaker	Katherine DAngelo	05/12/06 08:40	Custody Transfer
J30052-4.1	Katherine DAngelo	Secured Storage	05/12/06 16:47	Return to Storage
J30052-4.1	Secured Storage	Todd Shoemaker	05/22/06 11:30	Retrieve from Storage
J30052-4.1	Todd Shoemaker	Jasmine Heddish	05/22/06 11:33	Custody Transfer
J30052-4.1	Jasmine Heddish	Secured Storage	05/22/06 16:21	Return to Storage
J30052-4.2	Secured Storage	Todd Shoemaker	05/19/06 08:14	Retrieve from Storage
J30052-4.2	Todd Shoemaker	Jieyu Wang	05/19/06 08:17	Custody Transfer
J30052-4.2	Jieyu Wang	Tatiana Pidgainy	05/19/06 11:52	Custody Transfer
J30052-4.2	Tatiana Pidgainy	Secured Storage	05/19/06 16:42	Return to Storage
J30052-4.2.1	Tatiana Pidgainy	Metals Digestion	05/19/06 12:06	Digestate from J30052-4.2
J30052-4.2.1	Metals Digestion	Jieyu Wang	05/19/06 14:46	Digestate from J30052-4.2
J30052-4.2.1	Jieyu Wang	Metals Digestate Storage	05/19/06 14:46	Return to Storage
J30052-4.2.1	Metals Digestate Storage	Kathy Lukenda	05/20/06 08:13	Retrieve from Storage
J30052-4.2.1	Kathy Lukenda	Metals Digestate Storage	05/20/06 14:38	Return to Storage
J30052-4.3	Secured Storage	Todd Shoemaker	05/11/06 08:33	Retrieve from Storage
J30052-4.3	Todd Shoemaker	Nikul Patel	05/11/06 08:34	Custody Transfer
J30052-4.3	Nikul Patel	Secured Storage	05/11/06 16:50	Return to Storage
J30052-4.4	Secured Storage	Todd Shoemaker	05/22/06 09:11	Retrieve from Storage
J30052-4.4	Todd Shoemaker	Laura Earomirski	05/22/06 09:13	Custody Transfer
J30052-4.4	Laura Earomirski	Secured Storage	05/22/06 17:06	Return to Storage
J30052-4.4	Secured Storage	Mel Magallon	05/22/06 18:06	Retrieve from Storage
J30052-4.4	Mel Magallon	Secured Storage	05/23/06 00:53	Return to Storage
J30052-4.5	Secured Storage	Todd Shoemaker	05/15/06 09:09	Retrieve from Storage
J30052-4.5	Todd Shoemaker	Sarvadaman Tripathi	05/15/06 09:10	Custody Transfer
J30052-4.5	Sarvadaman Tripathi	Secured Storage	05/15/06 16:31	Return to Storage

# Accutest Internal Chain of Custody

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ  
 Received: 05/09/06

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
J30052-4.6	Secured Storage	Todd Shoemaker	05/15/06 09:09	Retrieve from Storage
J30052-4.6	Todd Shoemaker	Sarvadaman Tripathi	05/15/06 09:10	Custody Transfer
J30052-4.6	Sarvadaman Tripathi		05/15/06 12:42	Depleted
J30052-4.7	Secured Storage	Todd Shoemaker	05/12/06 08:39	Retrieve from Storage
J30052-4.7	Todd Shoemaker	Katherine DAngelo	05/12/06 08:40	Custody Transfer
J30052-4.7	Katherine DAngelo	Secured Storage	05/12/06 16:47	Return to Storage
J30052-4.8	Secured Storage	Matthew J. Chatten	05/10/06 08:18	Retrieve from Storage
J30052-4.8	Matthew J. Chatten		05/10/06 08:23	Depleted
J30052-4.10	Secured Storage	Huasheng Chen	05/18/06 09:23	Retrieve from Storage
J30052-4.10	Huasheng Chen	GCI	05/18/06 09:23	Load on Instrument
J30052-4.10	GCI	Huasheng Chen	05/19/06 08:19	Unload from Instrument
J30052-4.10	Huasheng Chen	Secured Storage	05/19/06 08:19	Return to Storage



## GC Volatiles

5

## QC Data Summaries

### Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

**Method Blank Summary**

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GII1593-MB	I131503.D	1	05/18/06	HSC	n/a	n/a	GII1593

The QC reported here applies to the following samples:

Method: SW846 8015

J30052-1, J30052-2, J30052-3, J30052-4

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.10	0.066	ug/l	
74-84-0	Ethane	ND	0.10	0.056	ug/l	
74-85-1	Ethene	ND	0.10	0.075	ug/l	

# Laboratory Control Sample Summary

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GII1593-LCS	II31501.D	1	05/18/06	HSC	n/a	n/a	GII1593

The QC reported here applies to the following samples:

Method: SW846 8015

J30052-1, J30052-2, J30052-3, J30052-4

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
74-82-8	Methane	100	83.5	84	67-128
74-84-0	Ethane	100	83.2	83	80-128
74-85-1	Ethene	100	91.5	92	70-140

5.2  
5

# Duplicate Summary

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
J30029-3DUP	II31508.D	1	05/18/06	HSC	n/a	n/a	GII1593
J30029-3	II31507.D	1	05/18/06	HSC	n/a	n/a	GII1593

The QC reported here applies to the following samples:

Method: SW846 8015

J30052-1, J30052-2, J30052-3, J30052-4

CAS No.	Compound	J30029-3		Q	RPD	Limits
		ug/l	DUP ug/l			
74-82-8	Methane	1280	1250		2	20
74-84-0	Ethane	0.15	0.15		0	10
74-85-1	Ethene	0.18	0.18		0	10

5.3  
5

# Duplicate Summary

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
J30154-1DUP	II31525.D	1	05/18/06	HSC	n/a	n/a	GII1593
J30154-1	II31524.D	1	05/18/06	HSC	n/a	n/a	GII1593

The QC reported here applies to the following samples:

Method: SW846 8015

J30052-1, J30052-2, J30052-3, J30052-4

CAS No.	Compound	J30154-1		Q	RPD	Limits
		ug/l	DUP Q ug/l			
74-82-8	Methane	157	162		3	20
74-84-0	Ethane	0.44	0.47		7	10
74-85-1	Ethene	0.12	0.14		15* a	10

(a) RPD acceptable due to low dup and sample concentrations.

5.3  
5

# Initial Calibration Summary

Job Number: J30052  
 Account: ENSRNJ ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

Sample: GII1454-ICC1454  
 Lab FileID: I128188.D

## Response Factor Report GCI I

Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Mon Feb 21 15:48:42 2005

### Calibration Files

1	=I128195.D	2	=I128197.D	3	=I128196.D
4	=I128190.D	5	=I128189.D	6	=I128188.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) METHANE		4.358	5.036	4.335	5.007	4.875	4.766	E2 7.77
2) ETHYLENE				8.288	9.357	8.794	8.840	E2 8.35
3) ETHANE				8.550	9.516	9.166	8.730	E2 8.77

### Signal #2 Calibration Files

1	=I128195.D	2	=I128197.D	3	=I128196.D
4	=I128190.D	5	=I128189.D	6	=I128188.D

Compound	1	2	3	4	5	6	Avg	%RSD
5) CARBON MONOXIDE		3.685	3.555	3.420	3.598	3.916	3.717	E1 6.97
6) METHANE #2		2.527	2.581	2.374	2.656	2.494	2.632	E1 6.82
7) CARBON DIOXIDE		3.608	3.622	3.379	3.780	3.882	3.971	E1 12.60
8) ETHYLENE #2				3.393	3.769	3.782	3.690	E1 4.10
9) ETHANE #2				3.613	3.979	3.935	3.740	E1 8.46

(#) = Out of Range ### Number of calibration levels exceeded format ###

MII1454.M

Mon Feb 21 16:21:21 2005

GCI I

5.4  
5

# Continuing Calibration Summary

Job Number: J30052  
Account: ENSRNJ ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

Sample: GII1593-CC1454  
Lab FileID: I131500.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\I131500.D\FID1A.CH Vial : 1  
Signal #2 : C:\HPCHEM\1\DATA\I131500.D\TCD2B.CH  
Acq On : 18 May 2006 8:34 am Operator: HUASHENG  
Sample : CC1454-100 Inst : GCII  
Misc : GC24560, GII1593, , , , , 1 Multiplr: 1.00  
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P

Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
Last Update : Mon May 22 14:15:34 2006  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 METHANE	476.642	548.440	-15.1	113	0.00
2 ETHYLENE	883.966	965.510	-9.2	110	0.00
3 ETHANE	873.024	987.410	-13.1	108	0.00

### Signal #2

5 CARBON MONOXIDE	37.165	38.070	-2.4	97	0.00
6 METHANE #2	26.315	21.690	17.6	87	0.00
7 CARBON DIOXIDE	39.714	31.460	20.8	81	0.00
8 ETHYLENE #2	36.897	32.320	12.4	85	0.00
9 ETHANE #2	37.405	31.500	15.8	80	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
I131500.D MII1454.M Mon May 22 14:16:15 2006 GCII

5.4  
5

# Continuing Calibration Summary

Job Number: J30052  
Account: ENSRNJ ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

Sample: GII1593-ECC1454  
Lab FileID: I131529.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\I131529.D\FID1A.CH Vial : 29  
Signal #2 : C:\HPCHEM\1\DATA\I131529.D\TCD2B.CH  
Acq On : 18 May 2006 5:00 pm Operator: HUASHENG  
Sample : ECC1454-100 Inst : GCII  
Misc : GC24573, GII1593, , , , , 1 Multiplr: 1.00  
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P

Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
Last Update : Mon May 22 14:15:34 2006  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 METHANE	476.642	540.540	-13.4	111	0.00
2 ETHYLENE	883.966	965.630	-9.2	110	0.00
3 ETHANE	873.024	974.020	-11.6	106	0.00

### Signal #2

5 CARBON MONOXIDE	37.165	37.430	-0.7	96	0.00
6 METHANE #2	26.315	22.850	13.2	92	0.02
7 CARBON DIOXIDE	39.714	33.110	16.6	85	0.00
8 ETHYLENE #2	36.897	31.240	15.3	83	0.00
9 ETHANE #2	37.405	31.780	15.0	81	0.00

(#) = Out of Range  
I131500.D MII1454.M

SPCC's out = 0 CCC's out = 0  
Mon May 22 14:26:02 2006 GCII

5.4  
5



## GC Volatiles

## Raw Data

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Manual Integrations  
APPROVED  
(compounds with "m" flag)  
Jessica Reitan-Chu  
05/24/06 00:52

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31512.D\FID1A.CH Vial: 13  
Signal #2 : C:\HPCHEM\1\DATA\II31512.D\TCD2B.CH  
Acq On : 18 May 2006 11:29 am Operator: HUASHENG  
Sample : J30052-1 Inst : GCII  
Misc : GC24560,GIII593,,,,,1 Multiplr: 1.00  
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
Quant Time: May 18 11:36 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
Last Update : Thu May 18 11:08:13 2006  
Response via : Initial Calibration  
DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) METHANE	2.17	298	0.625 ppmv
7) CARBON DIOXIDE	3.25	1024355	25793.299 ppmv m

(f)=RT Delta > 1/2 Window (m)=manual int.  
II31512.D MII1454.M Mon May 22 14:42:10 2006 GCII

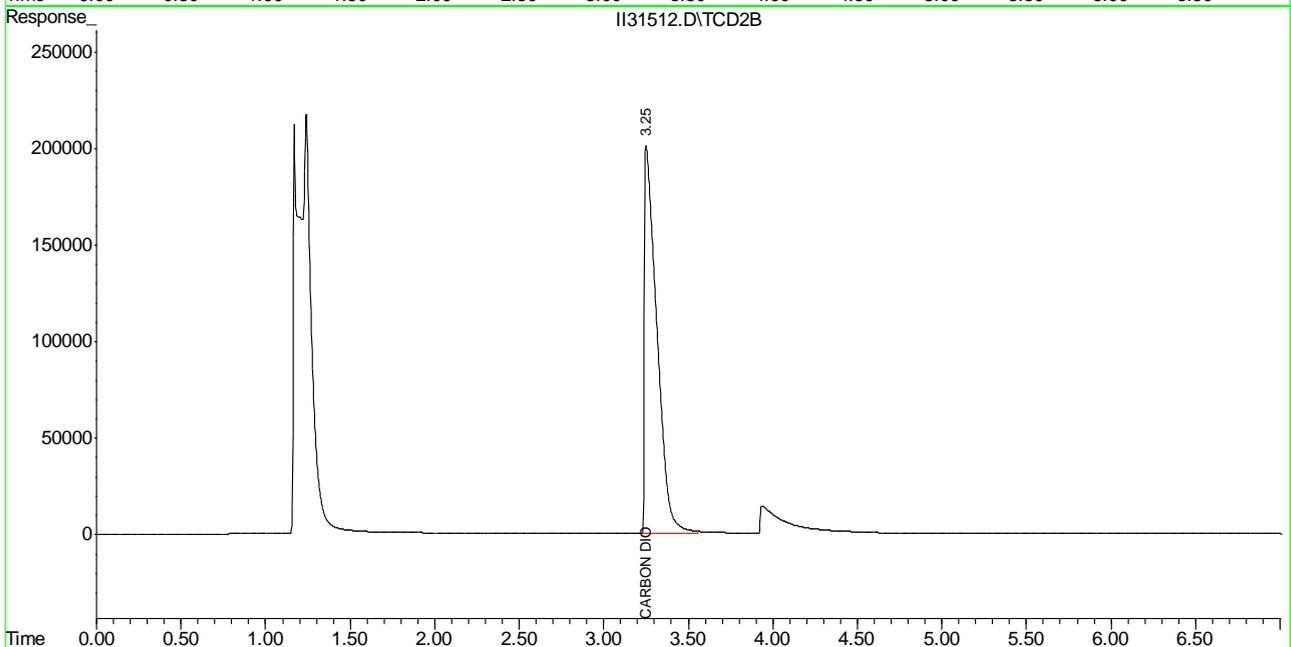
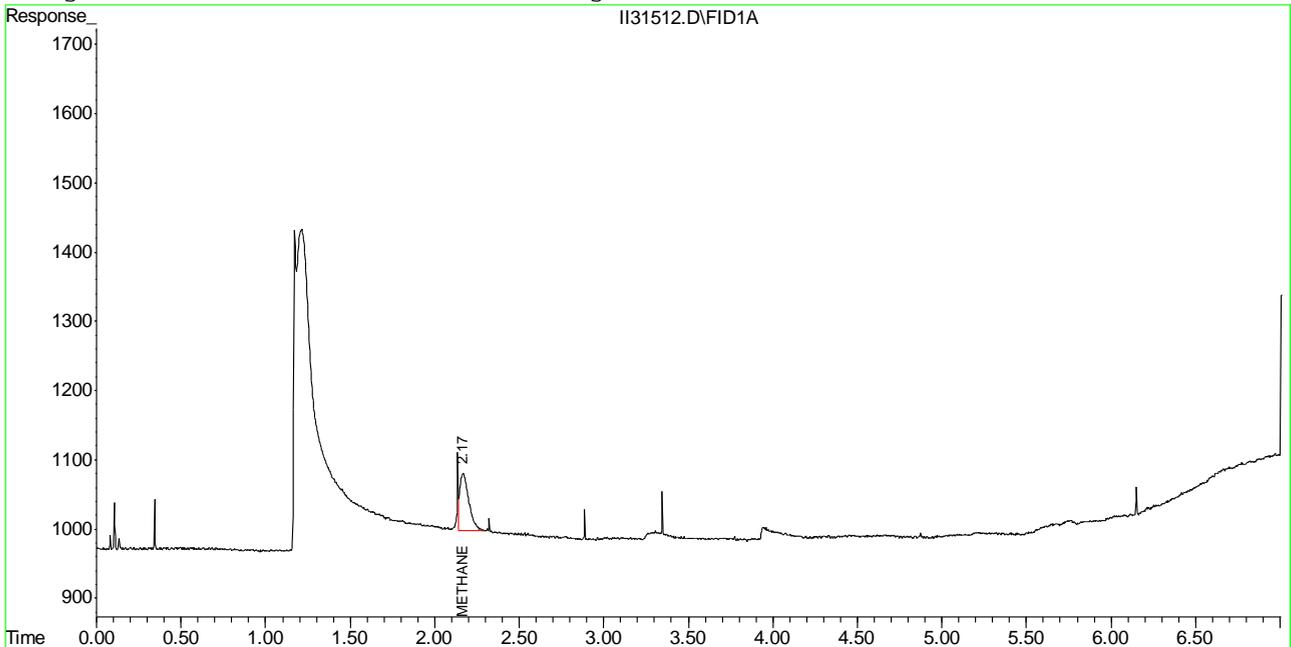
6.1.1  
6

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31512.D\FID1A.CH Vial: 13  
 Signal #2 : C:\HPCHEM\1\DATA\II31512.D\TCD2B.CH  
 Acq On : 18 May 2006 11:29 am Operator: HUASHENG  
 Sample : J30052-1 Inst : GCII  
 Misc : GC24560,GII1593,,,,,1 Multiplr: 1.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 11:36 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Thu May 18 11:08:13 2006  
 Response via : Multiple Level Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.



Dissolved Gas Calculation Worksheet

Data File Name I131512.D  
 Date Acquired 5/18/2006 11:29  
 Sample Name J30052-1  
 Sample Multiplier 1  
 Temperature(C) 22  
 Headspace Vol. (cc) 5  
 Sample Vol(cc) 37

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	MDL (ug/l)	Report (ug/l)
METHANE	16	22.4	55.5	295	24.21	298	264	0.07	0.05	0.01	39080	0.002	0.01	0.10	ND
ETHANE	30	22.4	55.5	295	24.21	0	0	0.00	0.00	0.00	27860	0.000	0.000	0.014	ND
ETHYLENE	28	22.4	55.5	295	24.21	0	0	0.00	0.00	0.00	10680	0.000	0.000	0.014	ND
CARBON DIO	44	22.4	55.5	295	24.21	1024355	123	25790.20	46881.34	6335.32	15080	4176.37	10512	100	10512

\* ppmv is corrected for helium blank background peak area

Definitions.

Molar Volume The volume of 1 mole of any gas at standard temperature and pressure(STP)  
 Water g/Moles 1 Liter of water is equal to 55.5g-moles  
 Temp-kelvin Is defined as 273 + degrees C  
 Corrected Gas Density Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)  
 Headspace conc(ug/l) Is equal to (ppmv reading) x (mw/corrected gas density)  
 Water Concentration(ug/l) Is equal to headspace conc(ug/l) x headspace vol/sample vol  
 Saturation Concentration(ug/l) Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

temp-c	Henry's Constants										
	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

6.1.2  
 6

Manual Integrations  
APPROVED  
(compounds with "m" flag)  
Jessica Reitan-Chu  
05/24/06 00:52

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31513.D\FID1A.CH Vial: 14  
Signal #2 : C:\HPCHEM\1\DATA\II31513.D\TCD2B.CH  
Acq On : 18 May 2006 11:42 am Operator: HUASHENG  
Sample : J30052-2 Inst : GCII  
Misc : GC24560,GII1593,,,,,1 Multiplr: 1.00  
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
Quant Time: May 18 11:48 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
Last Update : Thu May 18 11:08:13 2006  
Response via : Initial Calibration  
DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) METHANE	2.15	3264524	6849.002 ppmv
3) ETHANE	5.74	144	0.165 ppmv m
6) METHANE #2	2.15	138468	5261.888 ppmv
7) CARBON DIOXIDE	3.25	1860456	46846.354 ppmv m

(f)=RT Delta > 1/2 Window (m)=manual int.  
II31513.D MII1454.M Mon May 22 14:42:21 2006 GCII

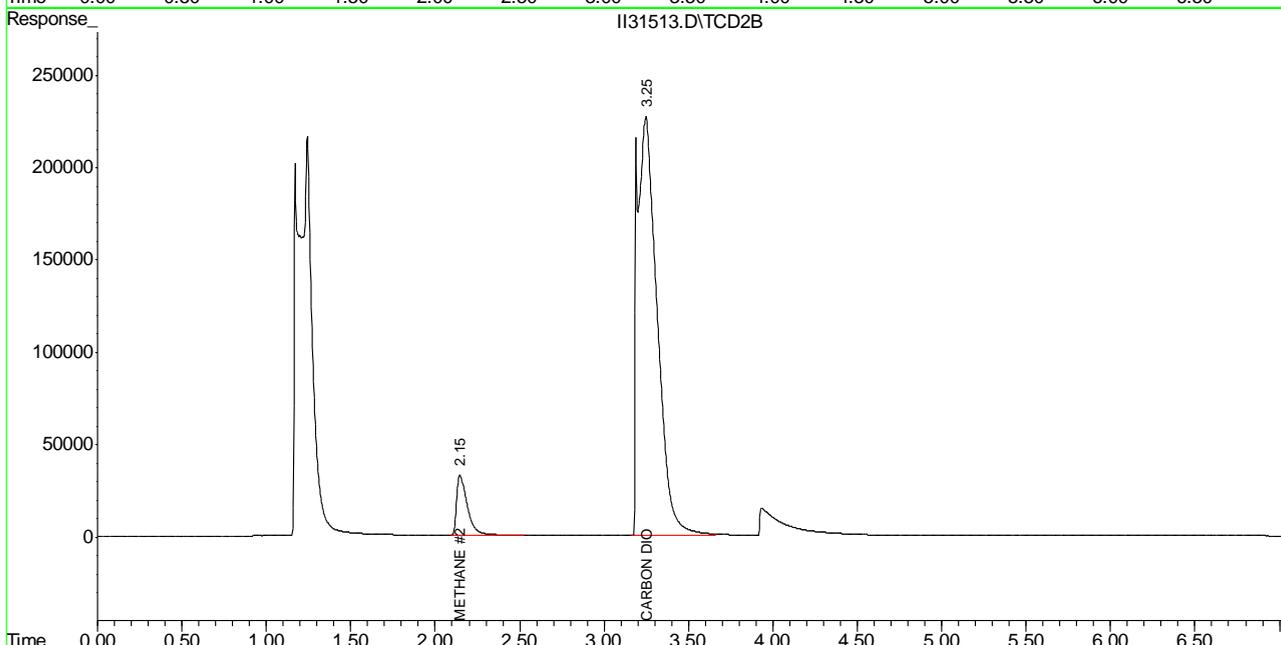
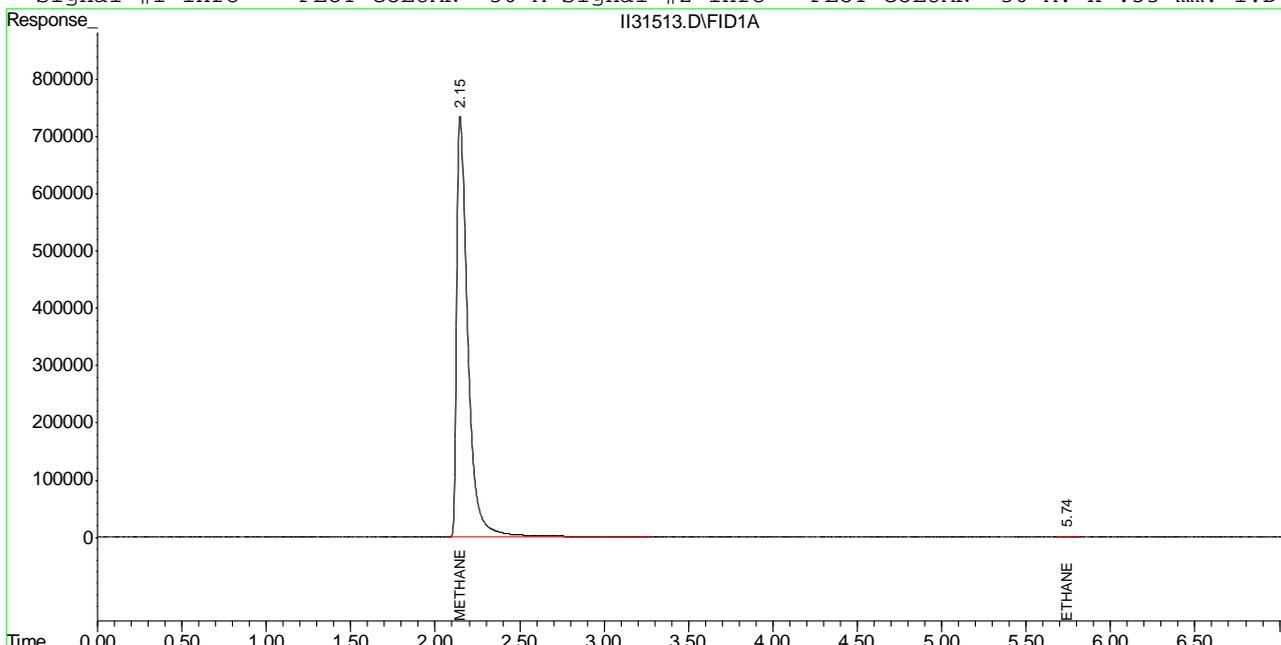
6.1.3  
6

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31513.D\FID1A.CH Vial: 14  
 Signal #2 : C:\HPCHEM\1\DATA\II31513.D\TCD2B.CH  
 Acq On : 18 May 2006 11:42 am Operator: HUASHENG  
 Sample : J30052-2 Inst : GCII  
 Misc : GC24560,GII1593,,,,,1 Multiplr: 1.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 11:48 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Thu May 18 11:08:13 2006  
 Response via : Multiple Level Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.



Dissolved Gas Calculation Worksheet

Data File Name I131513.D  
 Date Acquired 5/18/2006 11:42  
 Sample Name J30052-2  
 Sample Multiplier 1  
 Temperature(C) 22  
 Headspace Vol. (cc) 5  
 Sample Vol(cc) 37

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	MDL (ug/l)	Report (ug/l)
METHANE	16	22.4	55.5	295	24.21	3264524	264	6848.45	4526.94	611.75	39080	155.615	767.36	0.10	767.36
ETHANE	30	22.4	55.5	295	24.21	144	0	0.16	0.20	0.03	27860	0.010	0.037	0.014	0.037
ETHYLENE	28	22.4	55.5	295	24.21	0	0	0.00	0.00	0.00	10680	0.000	0.000	0.014	ND
CARBON DIO	44	22.4	55.5	295	24.21	1860456	123	46843.26	85151.51	11506.96	15080	7585.63	19093	100	19093

\* ppmv is corrected for helium blank background peak area

Definitions.

Molar Volume The volume of 1 mole of any gas at standard temperature and pressure(STP)  
 Water g/Moles 1 Liter of water is equal to 55.5g-moles  
 Temp-kelvin Is defined as 273 + degrees C  
 Corrected Gas Density Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)  
 Headspace conc(ug/l) Is equal to (ppmv reading) x (mw/corrected gas density)  
 Water Concentration(ug/l) Is equal to headspace conc(ug/l) x headspace vol/sample vol  
 Saturation Concentration(ug/l) Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

temp-c	Henry's Constants										
	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Manual Integrations  
APPROVED  
(compounds with "m" flag)  
Jessica Reitan-Chu  
05/24/06 00:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31514.D\FID1A.CH Vial: 15  
Signal #2 : C:\HPCHEM\1\DATA\II31514.D\TCD2B.CH  
Acq On : 18 May 2006 11:55 am Operator: HUASHENG  
Sample : J30052-3 Inst : GCII  
Misc : GC24560,GIII1593,,,,,1 Multiplr: 1.00  
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
Quant Time: May 18 12:04 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
Last Update : Thu May 18 11:08:13 2006  
Response via : Initial Calibration  
DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.

-----  
Compound R.T. Response Conc Units  
-----

Target Compounds

	Compound	R.T.	Response	Conc	Units
1)	METHANE	2.08	22175455	46524.310	ppmv m
2)	ETHYLENE	5.20	2743	3.103	ppmv m
3)	ETHANE	5.74	15399	17.639	ppmv m
6)	METHANE #2	2.08	1033677	39280.504	ppmv m
7)	CARBON DIOXIDE	3.24f	1651209	41577.507	ppmv m

-----  
(f)=RT Delta > 1/2 Window (m)=manual int.  
II31514.D MII1454.M Mon May 22 14:42:33 2006 GCII

6.1.5  
6

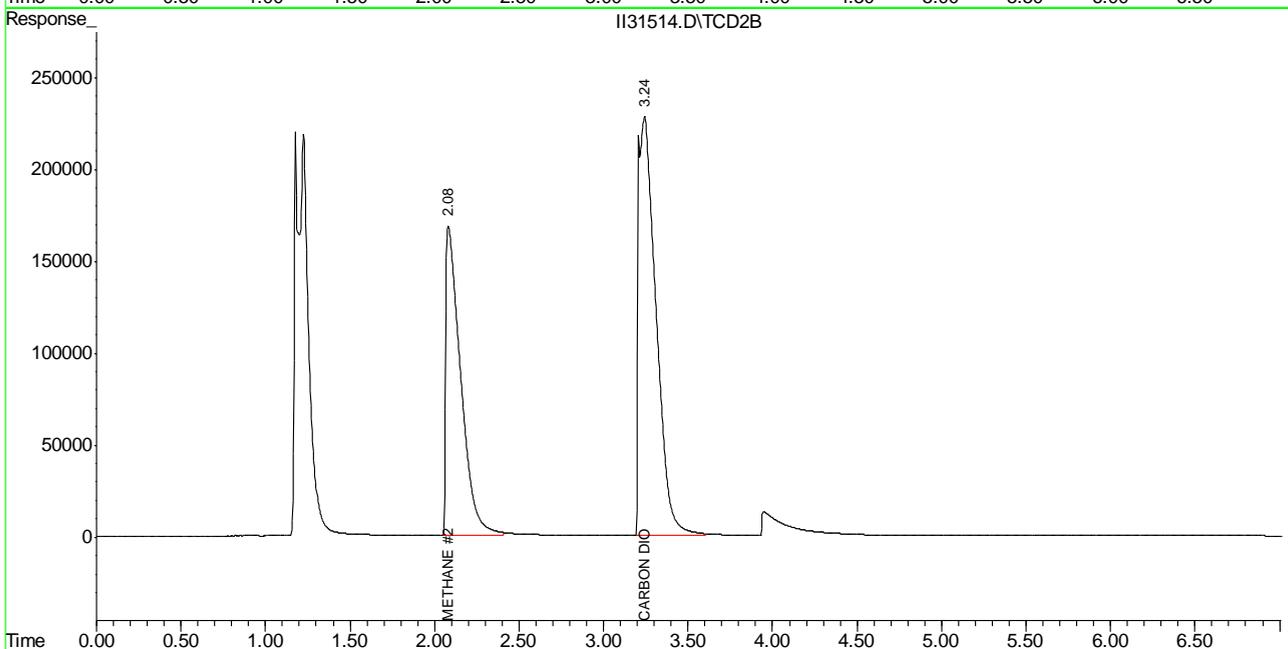
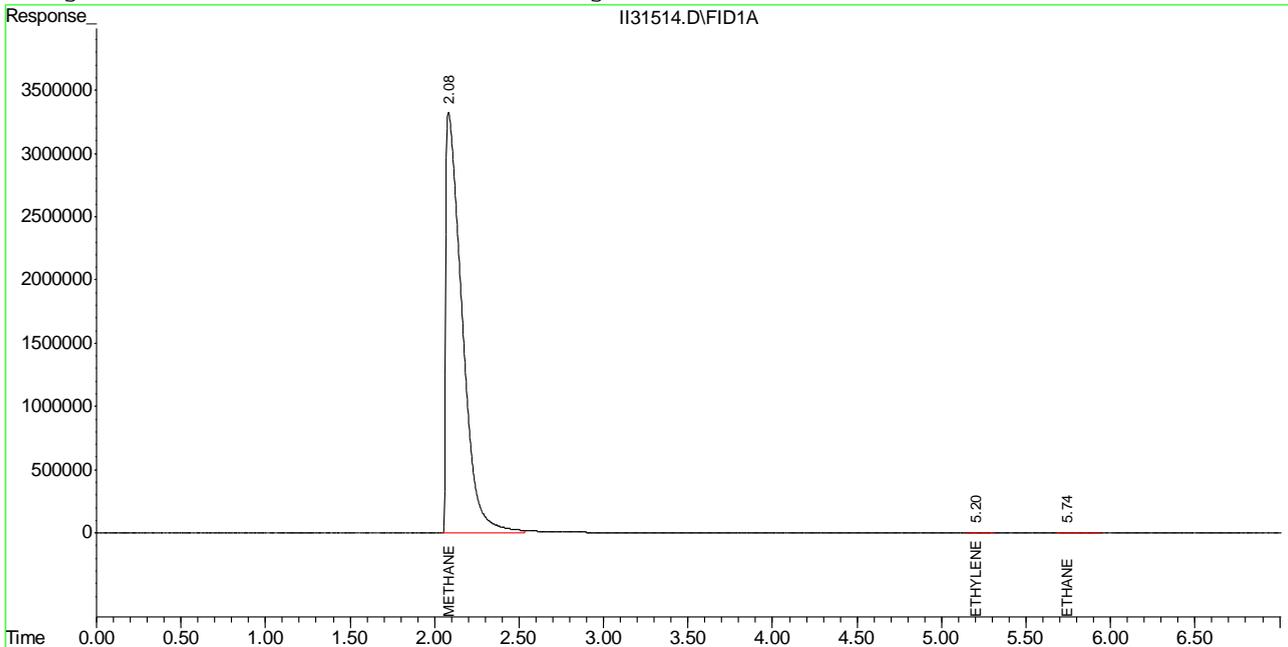
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31514.D\FID1A.CH Vial: 15  
 Signal #2 : C:\HPCHEM\1\DATA\II31514.D\TCD2B.CH  
 Acq On : 18 May 2006 11:55 am Operator: HUASHENG  
 Sample : J30052-3 Inst : GCII  
 Misc : GC24560,GII1593,,,,,1 Multiplr: 1.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 12:04 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Thu May 18 11:08:13 2006  
 Response via : Multiple Level Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.

6.1.5  
6



Dissolved Gas Calculation Worksheet

Data File Name I131514.D  
 Date Acquired 5/18/2006 11:55  
 Sample Name J30052-3  
 Sample Multiplier 1  
 Temperature(C) 22  
 Headspace Vol. (cc) 5  
 Sample Vol(cc) 37

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	MDL (ug/l)	Report (ug/l)
METHANE	16	22.4	55.5	295	24.21	22175455	264	46523.76	30752.99	4155.81	39080	1057.142	5212.95	0.10	5212.95
ETHANE	30	22.4	55.5	295	24.21	15399	0	17.64	21.86	2.95	27860	1.054	4.008	0.014	4.008
ETHYLENE	28	22.4	55.5	295	24.21	2743	0	3.10	3.59	0.49	10680	0.452	0.937	0.014	0.937
CARBON DIO	44	22.4	55.5	295	24.21	1651209	123	41574.41	75573.82	10212.68	15080	6732.41	16945	100	16945

\* ppmv is corrected for helium blank background peak area

Definitions.

Molar Volume The volume of 1 mole of any gas at standard temperature and pressure(STP)  
 Water g/Moles 1 Liter of water is equal to 55.5g-moles  
 Temp-kelvin Is defined as 273 + degrees C  
 Corrected Gas Density Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)  
 Headspace conc(ug/l) Is equal to (ppmv reading) x (mw/corrected gas density)  
 Water Concentration(ug/l) Is equal to headspace conc(ug/l) x headspace vol/sample vol  
 Saturation Concentration(ug/l) Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

temp-c	Henry's Constants										
	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

## Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31515.D\FID1A.CH Vial: 16  
 Signal #2 : C:\HPCHEM\1\DATA\II31515.D\TCD2B.CH  
 Acq On : 18 May 2006 12:10 pm Operator: HUASHENG  
 Sample : J30052-3 Inst : GCII  
 Misc : GC24560,GIII593,,,,,5 Multiplr: 5.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 12:18 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Thu May 18 11:08:13 2006  
 Response via : Initial Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) METHANE	2.13	7083371	74304.890 ppmv
2) ETHYLENE	5.21	812	4.593 ppmv m
3) ETHANE	5.74	4531	25.950 ppmv m
6) METHANE #2	2.13	314203	59699.753 ppmv
7) CARBON DIOXIDE	3.28	545350	68659.671 ppmv

(f)=RT Delta > 1/2 Window  
 II31515.D MII1454.M Mon May 22 14:42:44 2006

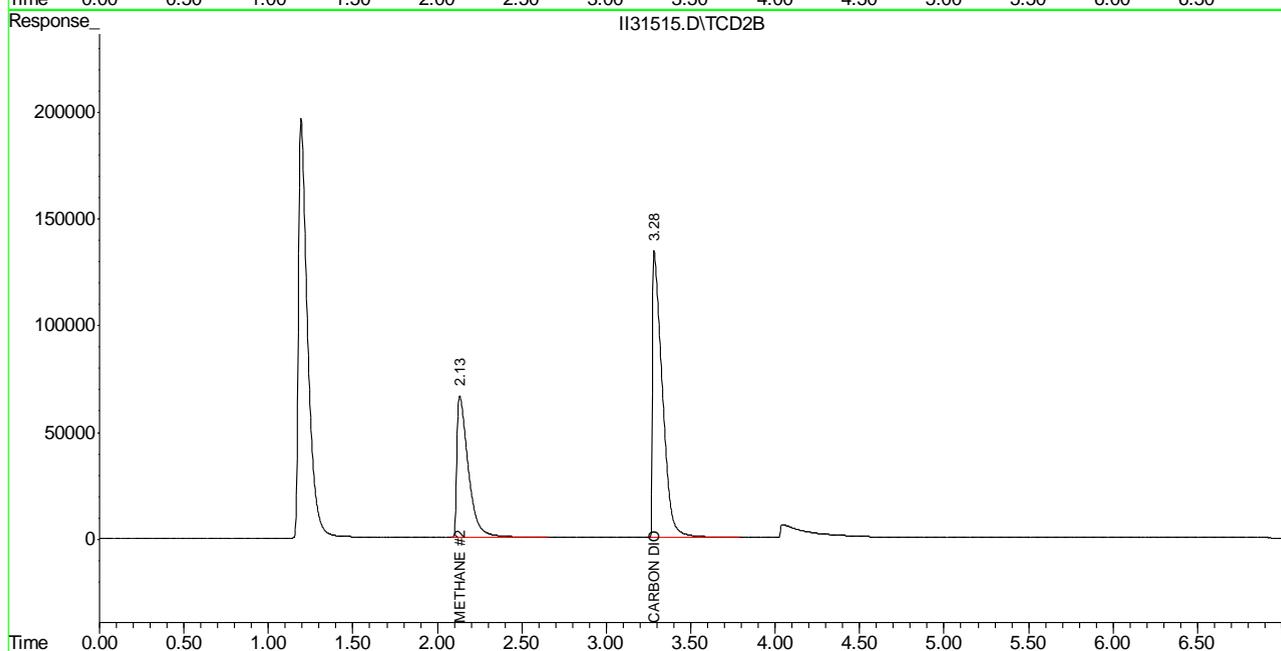
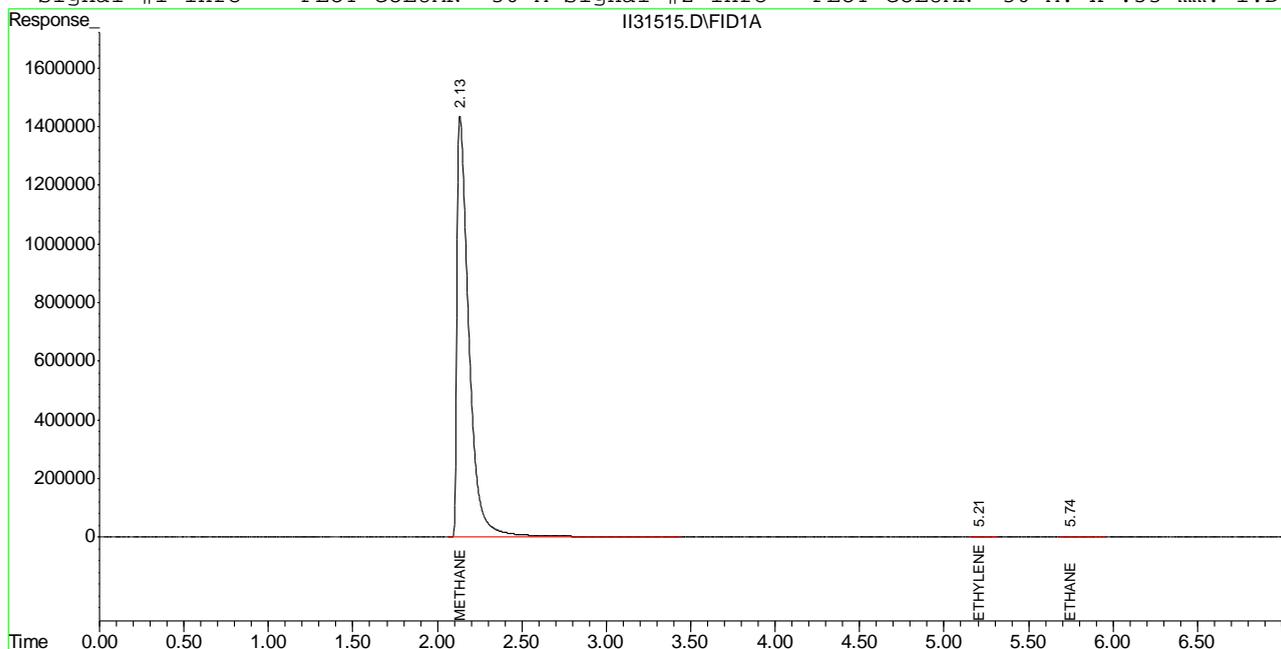
(m)=manual int.  
 GCII

## Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31515.D\FID1A.CH Vial: 16  
Signal #2 : C:\HPCHEM\1\DATA\II31515.D\TCD2B.CH  
Acq On : 18 May 2006 12:10 pm Operator: HUASHENG  
Sample : J30052-3 Inst : GCII  
Misc : GC24560,GII1593,,,,,5 Multiplr: 5.00  
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
Quant Time: May 18 12:18 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
Last Update : Thu May 18 11:08:13 2006  
Response via : Multiple Level Calibration  
DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.



Dissolved Gas Calculation Worksheet

Data File Name **I131515.D**  
 Date Acquired **5/18/2006 12:10**  
 Sample Name **J30052-3**  
 Sample Multiplier **5**  
 Temperature(C) **22**  
 Headspace Vol. (cc) **5**  
 Sample Vol(cc) **37**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	MDL (ug/l)	Report (ug/l)
METHANE	16	22.4	55.5	295	24.21	7083371	264	74302.12	49114.96	6637.16	39080	1688.339	8325.50	0.10	<b>8325.50</b>
ETHANE	30	22.4	55.5	295	24.21	4531	0	25.95	32.16	4.35	27860	1.551	5.897	0.014	<b>5.897</b>
ETHYLENE	28	22.4	55.5	295	24.21	812	0	4.59	5.31	0.72	10680	0.668	1.386	0.014	<b>1.386</b>
CARBON DIO	44	22.4	55.5	295	24.21	545350	123	68644.19	124781.17	16862.32	15080	11115.99	27978	100	<b>27978</b>

\* ppmv is corrected for helium blank background peak area

Definitions.

Molar Volume The volume of 1 mole of any gas at standard temperature and pressure(STP)  
 Water g/Moles 1 Liter of water is equal to 55.5g-moles  
 Temp-kelvin Is defined as 273 + degrees C  
 Corrected Gas Density Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)  
 Headspace conc(ug/l) Is equal to (ppmv reading) x (mw/corrected gas density)  
 Water Concentration(ug/l) Is equal to headspace conc(ug/l) x headspace vol/sample vol  
 Saturation Concentration(ug/l) Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

temp-c	Henry's Constants										
	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Manual Integrations  
APPROVED  
(compounds with "m" flag)  
Jessica Reitan-Chu  
05/24/06 00:55

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31516.D\FID1A.CH Vial: 17  
Signal #2 : C:\HPCHEM\1\DATA\II31516.D\TCD2B.CH  
Acq On : 18 May 2006 12:25 pm Operator: HUASHENG  
Sample : J30052-4 Inst : GCII  
Misc : GC24560,GII1593,,,,,1 Multiplr: 1.00  
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
Quant Time: May 18 12:50 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
Last Update : Thu May 18 11:08:13 2006  
Response via : Initial Calibration  
DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.

-----  
Compound R.T. Response Conc Units  
-----

Target Compounds

	Compound	R.T.	Response	Conc	Units
1)	METHANE	2.08	20980448	44017.175	ppmv m
2)	ETHYLENE	5.21	8295	9.384	ppmv m
3)	ETHANE	5.74	77140	88.360	ppmv m
6)	METHANE #2	2.08	1026793	39018.907	ppmv m
7)	CARBON DIOXIDE	3.25	2168261	54596.896	ppmv m
8)	ETHYLENE #2	5.21	348	9.432	ppmv
9)	ETHANE #2	5.74	2267	60.607	ppmv

-----  
(f)=RT Delta > 1/2 Window (m)=manual int.  
II31516.D MII1454.M Mon May 22 14:42:56 2006 GCII

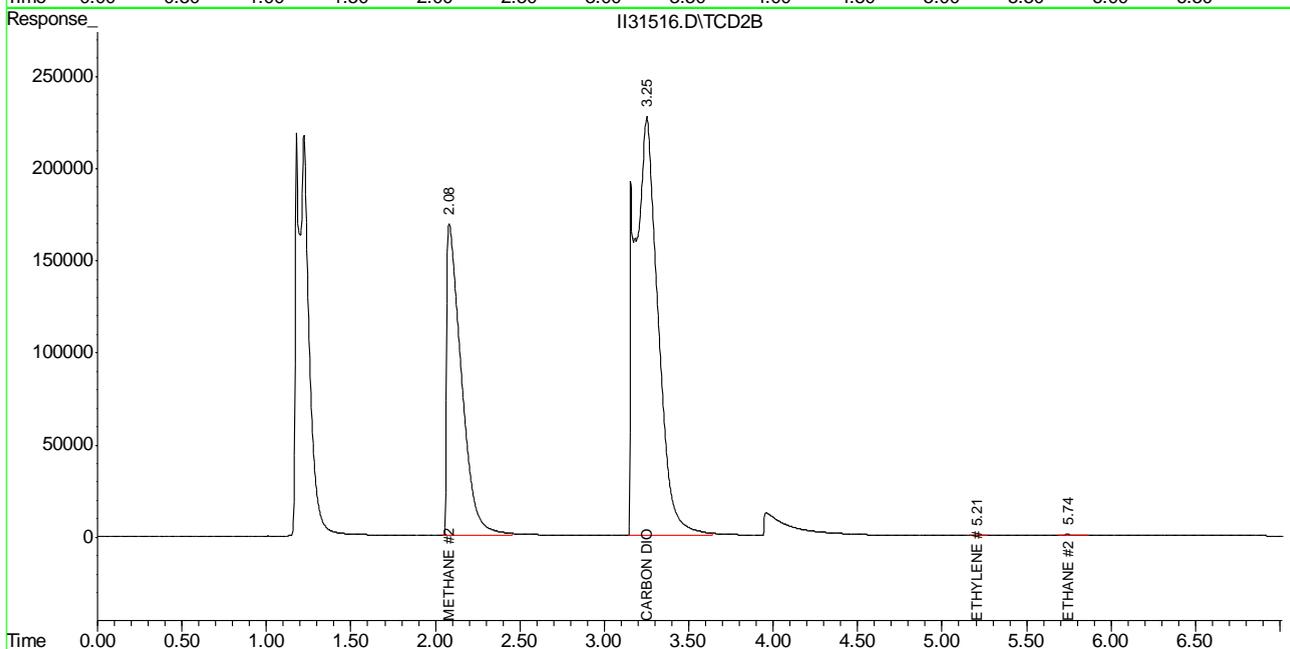
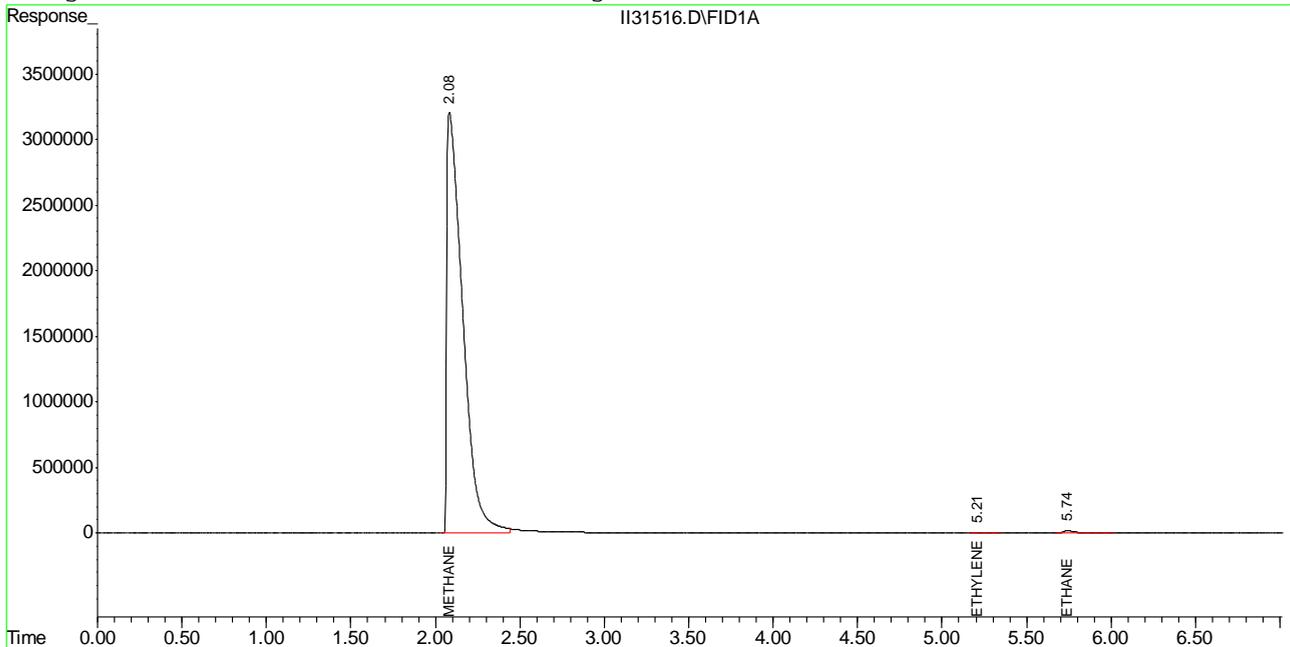
6.1.9  
6

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31516.D\FID1A.CH Vial: 17  
 Signal #2 : C:\HPCHEM\1\DATA\II31516.D\TCD2B.CH  
 Acq On : 18 May 2006 12:25 pm Operator: HUASHENG  
 Sample : J30052-4 Inst : GCII  
 Misc : GC24560,GII1593,,,,,1 Multiplr: 1.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 12:50 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Thu May 18 11:08:13 2006  
 Response via : Multiple Level Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.



Dissolved Gas Calculation Worksheet

Data File Name **II31516.D**  
 Date Acquired **5/18/2006 12:25**  
 Sample Name **J30052-4**  
 Sample Multiplier **1**  
 Temperature(C) **22**  
 Headspace Vol. (cc) **5**  
 Sample Vol(cc) **37**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	MDL (ug/l)	Report (ug/l)
METHANE	16	22.4	55.5	295	24.21	20980448	264	44016.62	29095.73	3931.86	39080	1000.173	4932.03	0.10	4932.03
ETHANE	30	22.4	55.5	295	24.21	77140	0	88.36	109.51	14.80	27860	5.281	20.080	0.014	20.080
ETHYLENE	28	22.4	55.5	295	24.21	8295	0	9.38	10.86	1.47	10680	1.365	2.832	0.014	2.832
CARBON DIO	44	22.4	55.5	295	24.21	2168261	123	54593.80	99240.42	13410.87	15080	8840.72	22252	100	22252

\* ppmv is corrected for helium blank background peak area

Definitions.

Molar Volume The volume of 1 mole of any gas at standard temperature and pressure(STP)  
 Water g/Moles 1 Liter of water is equal to 55.5g-moles  
 Temp-kelvin Is defined as 273 + degress C  
 Corrected Gas Density Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)  
 Headspace conc(ug/l) Is equal to (ppmv reading) x (mw/corrected gas density)  
 Water Concentration(ug/l) Is equal to headspace conc(ug/l) x headspace vol/sample vol  
 Saturation Concentration(ug/l) Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

temp-c	Henry's Constants										
	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

## Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31517.D\FID1A.CH Vial: 18  
 Signal #2 : C:\HPCHEM\1\DATA\II31517.D\TCD2B.CH  
 Acq On : 18 May 2006 12:56 pm Operator: HUASHENG  
 Sample : J30052-4 Inst : GCII  
 Misc : GC24560,GIII593,,,,,5 Multiplr: 5.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 13:34 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Thu May 18 11:08:13 2006  
 Response via : Initial Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) METHANE	2.13	7261701	76175.580 ppmv
2) ETHYLENE	5.21	2554	14.446 ppmv m
3) ETHANE	5.75	22881	131.044 ppmv m
6) METHANE #2	2.13	317139	60257.604 ppmv
7) CARBON DIOXIDE	3.26	939611	118297.207 ppmv m
9) ETHANE #2	5.75	700	93.571 ppmv m

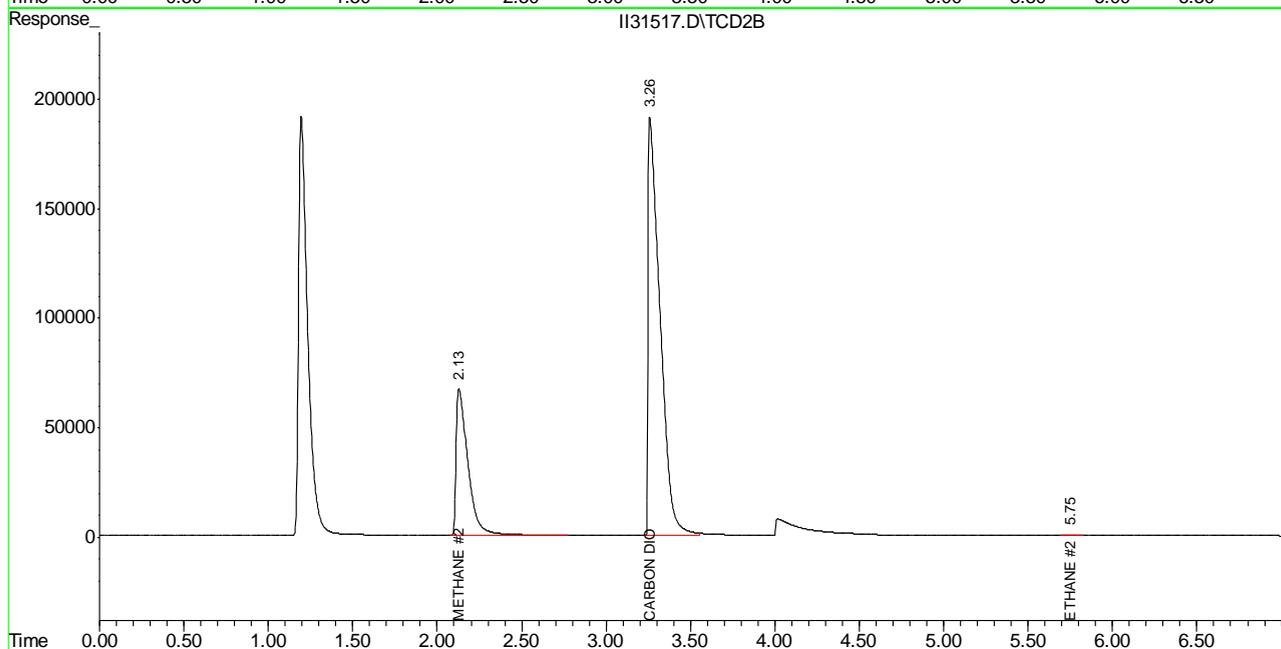
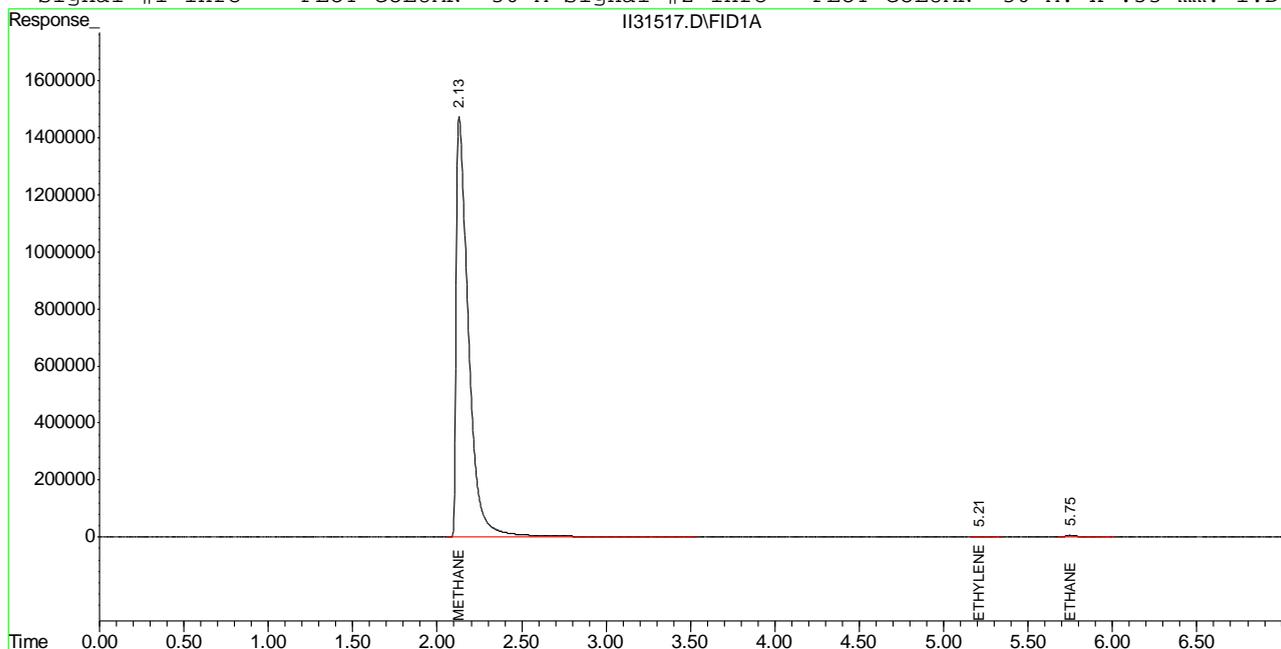
(f)=RT Delta > 1/2 Window (m)=manual int.  
 II31517.D MII1454.M Mon May 22 14:42:59 2006 GCII

## Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31517.D\FID1A.CH Vial: 18  
 Signal #2 : C:\HPCHEM\1\DATA\II31517.D\TCD2B.CH  
 Acq On : 18 May 2006 12:56 pm Operator: HUASHENG  
 Sample : J30052-4 Inst : GCII  
 Misc : GC24560,GII1593,,,,,5 Multiplr: 5.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 13:34 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Thu May 18 11:08:13 2006  
 Response via : Multiple Level Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.



## Dissolved Gas Calculation Worksheet

Data File Name I131517.D  
 Date Acquired 5/18/2006 12:56  
 Sample Name J30052-4  
 Sample Multiplier 5  
 Temperature(C) 22  
 Headspace Vol. (cc) 5  
 Sample Vol(cc) 37

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	MDL (ug/l)	Report (ug/l)
METHANE	16	22.4	55.5	295	24.21	7261701	264	76172.81	50351.52	6804.26	39080	1730.846	8535.11	0.10	8535.11
ETHANE	30	22.4	55.5	295	24.21	22881	0	131.04	162.42	21.95	27860	7.832	29.780	0.014	29.780
ETHYLENE	28	22.4	55.5	295	24.21	2554	0	14.45	16.71	2.26	10680	2.102	4.360	0.014	4.360
CARBON DIO	44	22.4	55.5	295	24.21	939611	123	118281.72	215012.11	29055.69	15080	19154.11	48210	100	48210

\* ppmv is corrected for helium blank background peak area

## Definitions.

Molar Volume The volume of 1 mole of any gas at standard temperature and pressure(STP)  
 Water g/Moles 1 Liter of water is equal to 55.5g-moles  
 Temp-kelvin Is defined as 273 + degrees C  
 Corrected Gas Density Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)  
 Headspace conc(ug/l) Is equal to (ppmv reading) x (mw/corrected gas density)  
 Water Concentration(ug/l) Is equal to headspace conc(ug/l) x headspace vol/sample vol  
 Saturation Concentration(ug/l) Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

temp-c	Henry's Constants										
	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31503.D\FID1A.CH Vial: 4  
 Signal #2 : C:\HPCHEM\1\DATA\II31503.D\TCD2B.CH  
 Acq On : 18 May 2006 9:22 am Operator: HUASHENG  
 Sample : MB Inst : GCII  
 Misc : GC24560,GII1593,,,,,1 Multiplr: 1.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 9:28 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Wed May 17 11:19:21 2006  
 Response via : Initial Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) METHANE	2.16	271	0.569 ppmv m
7) CARBON DIOXIDE	3.35	1815	45.702 ppmv

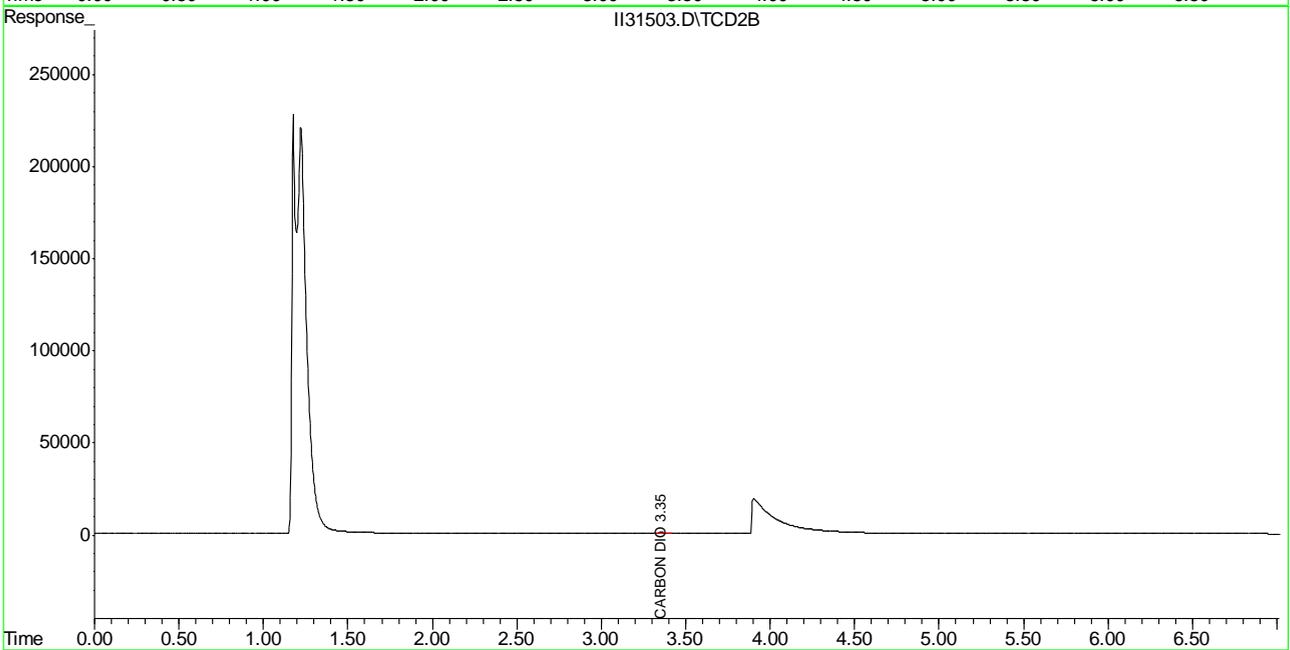
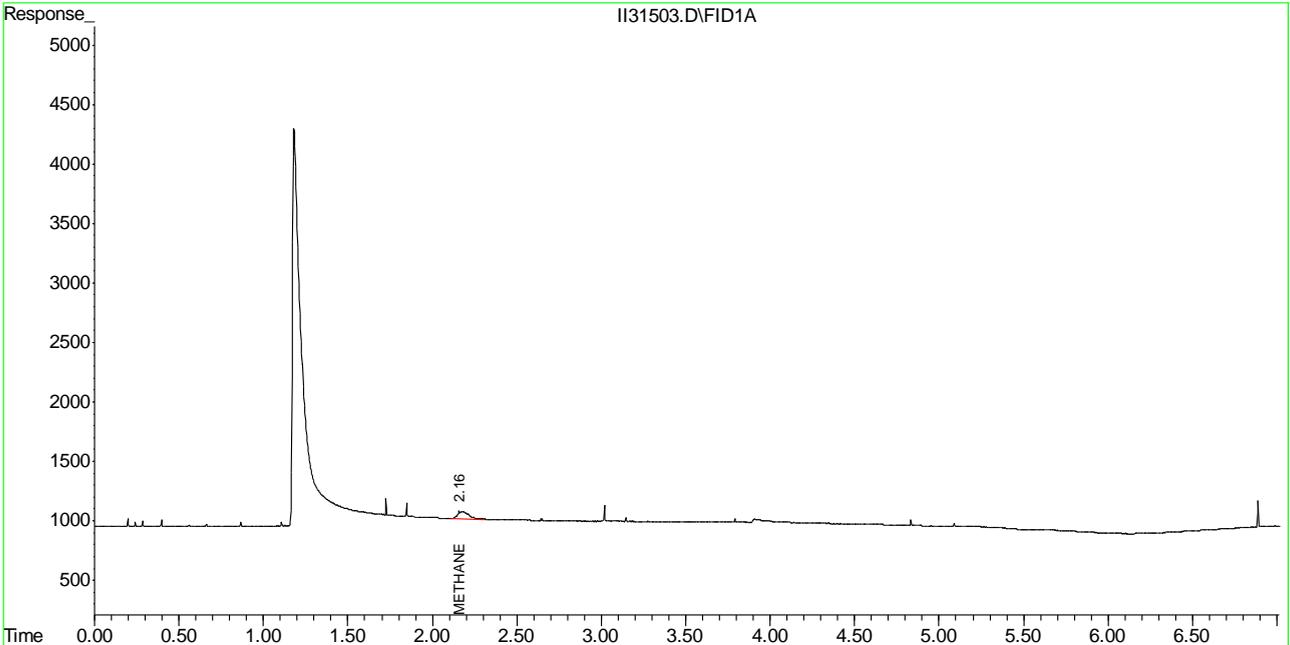
(f)=RT Delta > 1/2 Window (m)=manual int.  
 II31503.D MII1454.M Mon May 22 14:41:08 2006 GCII

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\II31503.D\FID1A.CH Vial: 4  
 Signal #2 : C:\HPCHEM\1\DATA\II31503.D\TCD2B.CH  
 Acq On : 18 May 2006 9:22 am Operator: HUASHENG  
 Sample : MB Inst : GCII  
 Misc : GC24560,GII1593,,,,,1 Multiplr: 1.00  
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P  
 Quant Time: May 18 9:28 2006 Quant Results File: MII1454.RES

Quant Method : C:\HPCHEM\1\METHODS\MII1454.M (RTE Integrator)  
 Title : 8015 DISSOLVED GASES BY GC FID/TCD CARBOXEN1006  
 Last Update : Wed May 17 11:19:21 2006  
 Response via : Multiple Level Calibration  
 DataAcq Meth : GASES2.M

Volume Inj. : 500 uL.  
 Signal #1 Phase : CARBOXEN 1006 Signal #2 Phase: CARBOXEN 1006  
 Signal #1 Info : PLOT COLUMN 30 M Signal #2 Info : PLOT COLUMN 30 M. x .53 mm. I.D.



Dissolved Gas Calculation Worksheet

Data File Name I131503.D  
 Date Acquired 5/18/2006 9:22  
 Sample Name MB  
 Sample Multiplier 1  
 Temperature(C) 22  
 Headspace Vol. (cc) 5  
 Sample Vol(cc) 37

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	MDL (ug/l)	Report (ug/l)
METHANE	16	22.4	55.5	295	24.21	271	264	0.01	0.01	0.00	39080	0.000	0.00	0.10	ND
ETHANE	30	22.4	55.5	295	24.21	0	0	0.00	0.00	0.00	27860	0.000	0.000	0.014	ND
ETHYLENE	28	22.4	55.5	295	24.21	0	0	0.00	0.00	0.00	10680	0.000	0.000	0.014	ND
CARBON DIO	44	22.4	55.5	295	24.21	1815	123	42.60	77.45	10.47	15080	6.90	17	100	ND

\* ppmv is corrected for helium blank background peak area

Definitions.

Molar Volume The volume of 1 mole of any gas at standard temperature and pressure(STP)  
 Water g/Moles 1 Liter of water is equal to 55.5g-moles  
 Temp-kelvin Is defined as 273 + degrees C  
 Corrected Gas Density Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)  
 Headspace conc(ug/l) Is equal to (ppmv reading) x (mw/corrected gas density)  
 Water Concentration(ug/l) Is equal to headspace conc(ug/l) x headspace vol/sample vol  
 Saturation Concentration(ug/l) Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

temp-c	Henry's Constants										
	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900



## Metals Analysis

### QC Data Summaries

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**Includes the following where applicable:**

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT  
Analyst: KL  
Parameters: Fe

Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
Run ID: MA17532

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:58	MA17532-STD1	1		STDA
09:04	MA17532-STD2	1		STDB
09:09	MA17532-STD3	1		STDC
09:15	MA17532-STD4	1		STDD
09:20	MA17532-STD5	1		STDE
09:25	MA17532-STD6	1		STD2
09:48	MA17532-STD7	1		STD3
09:54	MA17532-STD8	1		STDH
09:59	MA17532-STD9	1		STDF
10:04	MA17532-STD10	1		STDG
10:24	MA17532-STD11	1		STDB
10:39	MA17532-STD12	1		STDA
10:46	MA17532-HSTD1	1		
10:52	MA17532-CRIB1	1		
10:57	MA17532-CRIB2	1		
11:02	MA17532-ICV1	1		
11:08	MA17532-ICB1	1		
11:13	MA17532-CCV1	1		
11:18	MA17532-CCB1	1		
11:24	MA17532-ICSA1	1		
11:29	MA17532-ICSAB1	1		
11:35	MA17532-CCV2	1		
11:40	MA17532-CCB2	1		
11:47	MP34469-MB1	1		Batch to reanalyze for Pb
11:53	MP34469-LC1	1		
11:58	MP34469-S1	1		
12:04	MP34469-S2	1		
12:10	J29351-2	1		(sample used for QC only; not part of login J30052)
12:15	MP34469-SD1	5		
12:20	ZZZZZ	1		
12:26	ZZZZZ	1		
12:34	ZZZZZ	1		
12:47	ZZZZZ	1		

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Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT  
Analyst: KL  
Parameters: Fe

Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
Run ID: MA17532

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:52	MA17532-CCV3	1		
12:58	MA17532-CCB3	1		
13:03	ZZZZZZ	1		
13:09	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:19	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:30	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:42	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:53	MA17532-CCV4	1		
14:02	MA17532-CCB4	1		
14:27	ZZZZZZ	1		
14:32	ZZZZZZ	1		
14:37	ZZZZZZ	1		
14:42	ZZZZZZ	1		
14:48	ZZZZZZ	5		
14:53	ZZZZZZ	1		
14:58	ZZZZZZ	2		
15:04	ZZZZZZ	1		
15:09	MA17532-CCV5	1		
15:14	MA17532-CCB5	1		
15:20	ZZZZZZ	1		
15:25	MP34353-SD1	5		
15:29	MP34434-MB2	1		
15:34	MP34434-LC2	1		
15:40	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:50	J30799-2	1		(sample used for QC only; not part of login J30052)
15:55	ZZZZZZ	1		
16:03	ZZZZZZ	1		
16:08	MA17532-CCV6	1		

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Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT  
Analyst: KL  
Parameters: Fe

Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
Run ID: MA17532

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:13	MA17532-CCB6	1		
16:30	MA17532-ICSA2	1		
16:35	MA17532-ICSA2	1		
16:41	MA17532-CCV7	1		
16:46	MA17532-CCB7	1		
16:51	ZZZZZZ	1		
16:57	ZZZZZZ	1		
17:02	ZZZZZZ	5		
17:07	ZZZZZZ	1		
17:13	ZZZZZZ	1		
17:18	ZZZZZZ	1		
17:23	ZZZZZZ	5		
17:28	ZZZZZZ	2		
17:34	ZZZZZZ	1		
17:39	ZZZZZZ	1		
17:44	MA17532-CCV8	1		
17:50	MA17532-CCB8	1		
17:55	ZZZZZZ	1		
18:00	ZZZZZZ	1		
18:06	MP34466-MB1	1		
18:11	MP34466-LC1	1		
18:16	MP34466-S1	1		
18:22	MP34466-S2	1		
18:27	MP34466-SD1	5		
18:32	ZZZZZZ	1		
18:37	ZZZZZZ	1		
18:43	ZZZZZZ	1		
18:48	MA17532-CCV9	1		
18:53	MA17532-CCB9	1		
18:59	ZZZZZZ	1		
19:04	ZZZZZZ	1		
19:09	ZZZZZZ	1		
19:15	ZZZZZZ	1		

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Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT  
Analyst: KL  
Parameters: Fe

Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
Run ID: MA17532

Time	Sample Description	Dilution Factor	PS Recov	Comments
------	--------------------	-----------------	----------	----------

19:20	ZZZZZZ	1		
19:25	ZZZZZZ	1		
19:31	ZZZZZZ	1		
19:36	J30052-1	1		
19:41	J30052-2	1		
19:46	J30052-3	1		
19:52	MA17532-CCV10	1		
19:57	MA17532-CCB10	1		
20:03	J30052-4	1		
----->	Last reportable sample/prep for job J30052			
20:08	ZZZZZZ	1		
20:15	ZZZZZZ	1		
20:20	ZZZZZZ	1		
20:26	ZZZZZZ	1		
20:31	ZZZZZZ	1		
20:36	ZZZZZZ	5		
20:42	MA17532-CCV11	1		
20:47	MA17532-CCB11	1		
20:52	MA17532-ICSA3	1		
20:58	MA17532-ICSAB3	1		
21:03	MA17532-CCV12	1		
----->	21:09 MA17532-CCB12 1 Last reportable CCB for job J30052 Refer to raw data for calibration curve and standards.			

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INTERNAL STANDARD SUMMARY

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT  
 Analyst: KL  
 Parameters: Fe

Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
 Run ID: MA17532

Time	Sample Description	Istd#1
08:58	MA17532-STD1	244728 R
09:04	MA17532-STD2	244796
09:09	MA17532-STD3	243613
09:15	MA17532-STD4	244861
09:20	MA17532-STD5	244454
09:25	MA17532-STD6	244993
09:48	MA17532-STD7	242390
09:54	MA17532-STD8	240012
09:59	MA17532-STD9	224399
10:04	MA17532-STD10	219036
10:24	MA17532-STD11	241982
10:39	MA17532-STD12	241482
10:46	MA17532-HSTD1	242915
10:52	MA17532-CRIB1	242216
10:57	MA17532-CRIB2	242130
11:02	MA17532-ICV1	243152
11:08	MA17532-ICB1	242965
11:13	MA17532-CCV1	243968
11:18	MA17532-CCB1	244033
11:24	MA17532-ICSA1	232530
11:29	MA17532-ICSAB1	232064
11:35	MA17532-CCV2	244538
11:40	MA17532-CCB2	243732
11:47	MP34469-MB1	232782
11:53	MP34469-LC1	239240
11:58	MP34469-S1	241733
12:04	MP34469-S2	237756
12:10	J29351-2	243424
12:15	MP34469-SD1	240619
12:20	ZZZZZ	237025
12:26	ZZZZZ	234194
12:34	ZZZZZ	240974
12:47	ZZZZZ	229260

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INTERNAL STANDARD SUMMARY

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT      Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
 Analyst: KL      Run ID: MA17532  
 Parameters: Fe

Time	Sample Description	Istd#1
12:52	MA17532-CCV3	243757
12:58	MA17532-CCB3	244489
13:03	ZZZZZZ	239077
13:09	ZZZZZZ	237763
13:14	ZZZZZZ	238877
13:19	ZZZZZZ	239481
13:24	ZZZZZZ	241807
13:30	ZZZZZZ	238854
13:35	ZZZZZZ	238329
13:42	ZZZZZZ	238513
13:48	ZZZZZZ	241105
13:53	MA17532-CCV4	246797
14:02	MA17532-CCB4	242078
14:27	ZZZZZZ	237141
14:32	ZZZZZZ	218399
14:37	ZZZZZZ	244316
14:42	ZZZZZZ	236977
14:48	ZZZZZZ	252869
14:53	ZZZZZZ	269842
14:58	ZZZZZZ	236195
15:04	ZZZZZZ	264970
15:09	MA17532-CCV5	243417
15:14	MA17532-CCB5	238777
15:20	ZZZZZZ	245169
15:25	MP34353-SD1	245411
15:29	MP34434-MB2	242703
15:34	MP34434-LC2	233876
15:40	ZZZZZZ	236877
15:45	ZZZZZZ	241456
15:50	J30799-2	241926
15:55	ZZZZZZ	240768
16:03	ZZZZZZ	240372
16:08	MA17532-CCV6	244896

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INTERNAL STANDARD SUMMARY

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT      Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
 Analyst: KL      Run ID: MA17532  
 Parameters: Fe

Time	Sample Description	Istd#1
16:13	MA17532-CCB6	243630
16:30	MA17532-ICSA2	234757
16:35	MA17532-ICSAB2	232115
16:41	MA17532-CCV7	241894
16:46	MA17532-CCB7	243977
16:51	ZZZZZ	242743
16:57	ZZZZZ	238440
17:02	ZZZZZ	250154
17:07	ZZZZZ	268165
17:13	ZZZZZ	240046
17:18	ZZZZZ	239475
17:23	ZZZZZ	246995
17:28	ZZZZZ	242828
17:34	ZZZZZ	240781
17:39	ZZZZZ	236771
17:44	MA17532-CCV8	242554
17:50	MA17532-CCB8	241252
17:55	ZZZZZ	239107
18:00	ZZZZZ	240070
18:06	MP34466-MB1	238612
18:11	MP34466-LC1	242248
18:16	MP34466-S1	237729
18:22	MP34466-S2	239295
18:27	MP34466-SD1	244480
18:32	ZZZZZ	246515
18:37	ZZZZZ	237250
18:43	ZZZZZ	233330
18:48	MA17532-CCV9	242548
18:53	MA17532-CCB9	241035
18:59	ZZZZZ	245327
19:04	ZZZZZ	251687
19:09	ZZZZZ	242424
19:15	ZZZZZ	240411

7.1.1  
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INTERNAL STANDARD SUMMARY

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT      Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
 Analyst: KL      Run ID: MA17532

Parameters: Fe

Time	Sample Description	Istd#1
19:20	ZZZZZZ	236111
19:25	ZZZZZZ	242533
19:31	ZZZZZZ	260152
19:36	J30052-1	238944
19:41	J30052-2	238693
19:46	J30052-3	238849
19:52	MA17532-CCV10	242398
19:57	MA17532-CCB10	241268
20:03	J30052-4	236007
20:08	ZZZZZZ	236976
20:15	ZZZZZZ	235223
20:20	ZZZZZZ	236915
20:26	ZZZZZZ	244344
20:31	ZZZZZZ	241658
20:36	ZZZZZZ	248613
20:42	MA17532-CCV11	240705
20:47	MA17532-CCB11	237734
20:52	MA17532-ICSA3	225330
20:58	MA17532-ICSAB3	231470
21:03	MA17532-CCV12	245279
21:09	MA17532-CCB12	243327

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

7.1.1  
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BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT Date Analyzed: 05/20/06 Methods: EPA 200.7, SW846 6010B  
 QC Limits: result < RL Run ID: MA17532 Units: ug/l

Time: Sample ID:	RL	IDL	11:08 ICB1	final	11:18 CCB1	final	11:40 CCB2	final	12:58 CCB3	final
Aluminum	200	40	anr							
Antimony	6.0	5.1	anr							
Arsenic	8.0	4.4	anr							
Barium	200	1.1	anr							
Beryllium	1.0	.1	anr							
Cadmium	4.0	.6	anr							
Calcium	5000	42	anr							
Chromium	10	.7	anr							
Cobalt	50	.8	anr							
Copper	25	.9	anr							
Iron	100	41	7.3	<100	10	<100	42.0	<100	12.8	<100
Lead	3.0	2.9	anr							
Magnesium	5000	20	anr							
Manganese	15	.2	anr							
Nickel	40	3.9	anr							
Potassium	5000	53	anr							
Selenium	10	3.6	anr							
Silver	10	.8	anr							
Sodium	5000	150	anr							
Thallium	10	6.6	anr							
Vanadium	50	1.2	anr							
Zinc	20	1.2	anr							

(\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.2  
7

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT Date Analyzed: 05/20/06 Methods: EPA 200.7, SW846 6010B  
 QC Limits: result < RL Run ID: MA17532 Units: ug/l

Time: Sample ID:	RL	IDL	14:02 CCB4 raw	final	15:14 CCB5 raw	final	16:13 CCB6 raw	final	16:46 CCB7 raw	final
Aluminum	200	40	anr							
Antimony	6.0	5.1	anr							
Arsenic	8.0	4.4	anr							
Barium	200	1.1	anr							
Beryllium	1.0	.1	anr							
Cadmium	4.0	.6	anr							
Calcium	5000	42	anr							
Chromium	10	.7	anr							
Cobalt	50	.8	anr							
Copper	25	.9	anr							
Iron	100	41	20.2	<100	0.21	<100	34.6	<100	60.4	<100
Lead	3.0	2.9	anr							
Magnesium	5000	20	anr							
Manganese	15	.2	anr							
Nickel	40	3.9	anr							
Potassium	5000	53	anr							
Selenium	10	3.6	anr							
Silver	10	.8	anr							
Sodium	5000	150	anr							
Thallium	10	6.6	anr							
Vanadium	50	1.2	anr							
Zinc	20	1.2	anr							

(\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.2  
 7

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT Date Analyzed: 05/20/06 Methods: EPA 200.7, SW846 6010B  
 QC Limits: result < RL Run ID: MA17532 Units: ug/l

Time: Sample ID:	RL	IDL	17:50 CCB8 raw	final	18:53 CCB9 raw	final	19:57 CCB10 raw	final	20:47 CCB11 raw	final
Aluminum	200	40	anr							
Antimony	6.0	5.1	anr							
Arsenic	8.0	4.4	anr							
Barium	200	1.1	anr							
Beryllium	1.0	.1	anr							
Cadmium	4.0	.6	anr							
Calcium	5000	42	anr							
Chromium	10	.7	anr							
Cobalt	50	.8	anr							
Copper	25	.9	anr							
Iron	100	41	44.1	<100	28.3	<100	35.7	<100	74.6	<100
Lead	3.0	2.9	anr							
Magnesium	5000	20	anr							
Manganese	15	.2	anr							
Nickel	40	3.9	anr							
Potassium	5000	53	anr							
Selenium	10	3.6	anr							
Silver	10	.8	anr							
Sodium	5000	150	anr							
Thallium	10	6.6	anr							
Vanadium	50	1.2	anr							
Zinc	20	1.2	anr							

(\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.2  
7

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT Date Analyzed: 05/20/06 Methods: EPA 200.7, SW846 6010B  
 QC Limits: result < RL Run ID: MA17532 Units: ug/l

Time: Sample ID:	RL	IDL	21:09 CCB12 raw	fi nal
Aluminum	200	40	anr	
Antimony	6.0	5.1	anr	
Arsenic	8.0	4.4	anr	
Barium	200	1.1	anr	
Beryllium	1.0	.1	anr	
Cadmium	4.0	.6	anr	
Calcium	5000	42	anr	
Chromium	10	.7	anr	
Cobalt	50	.8	anr	
Copper	25	.9	anr	
Iron	100	41	61.0	<100
Lead	3.0	2.9	anr	
Magnesium	5000	20	anr	
Manganese	15	.2	anr	
Nickel	40	3.9	anr	
Potassium	5000	53	anr	
Selenium	10	3.6	anr	
Silver	10	.8	anr	
Sodium	5000	150	anr	
Thallium	10	6.6	anr	
Vanadium	50	1.2	anr	
Zinc	20	1.2	anr	

(\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.2  
7

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT      Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
QC Limits: 95 to 105 % Recovery      Run ID: MA17532      Units: ug/l

Metal	Time:	11:02		CCV True	11:13		CCV True	11:35	
	Sample ID:	ICV	ICV1		CCV1	CCV2		Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	5000	5110	102.2	40000	39400	98.5	40000	39400	98.5
Lead	anr								
Magnesium	anr								
Manganese	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Thallium	anr								
Vanadium	anr								
Zinc	anr								

(\*) Outside of QC limits  
(anr) Analyte not requested

7.1.3  
7

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT      Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
QC Limits: 95 to 105 % Recovery      Run ID: MA17532      Units: ug/l

Metal	Time:	12:52		13:53		15:09			
	Sample ID:	CCV	CCV3	CCV	CCV4	CCV	CCV5		
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	40000	39000	97.5	40000	39500	98.8	40000	39400	98.5
Lead	anr								
Magnesium	anr								
Manganese	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Thallium	anr								
Vanadium	anr								
Zinc	anr								

(\*) Outside of QC limits  
(anr) Analyte not requested

7.1.3  
7

**CALIBRATION CHECK STANDARDS SUMMARY**  
 Initial and Continuing Calibration Checks

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT      Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
 QC Limits: 95 to 105 % Recovery      Run ID: MA17532      Units: ug/l

Metal	Time: Sample ID: CCV	16:08 CCV6		CCV	16:41 CCV7		CCV	17:44 CCV8	
		Results	% Rec		Results	% Rec		Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	40000	39900	99.8	40000	39800	99.5	40000	40100	100.3
Lead	anr								
Magnesium	anr								
Manganese	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Thallium	anr								
Vanadium	anr								
Zinc	anr								

(\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.3  
7

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT      Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
QC Limits: 95 to 105 % Recovery      Run ID: MA17532      Units: ug/l

Metal	Time:	18:48		19:52		20:42			
	Sample ID:	CCV	CCV9	CCV	CCV10	CCV	CCV11		
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	40000	40200	100.5	40000	40700	101.8	40000	41400	103.5
Lead	anr								
Magnesium	anr								
Manganese	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Thallium	anr								
Vanadium	anr								
Zinc	anr								

(\*) Outside of QC limits  
(anr) Analyte not requested

7.1.3  
7

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT      Date Analyzed: 05/20/06      Methods: EPA 200.7, SW846 6010B  
QC Limits: 95 to 105 % Recovery      Run ID: MA17532      Units: ug/l

Time:	21:03		
Sample ID:	CCV	CCV12	
Metal	True	Results	% Rec

Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	40000	41000	102.5
Lead	anr		
Magnesium	anr		
Manganese	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Thallium	anr		
Vanadium	anr		
Zinc	anr		

(\*) Outside of QC limits  
(anr) Analyte not requested

7.1.3  
7

HIGH STANDARD CHECK SUMMARY

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT Date Analyzed: 05/20/06 Methods: EPA 200.7, SW846 6010B  
 QC Limits: 95 to 105 % Recovery Run ID: MA17532 Units: ug/l

Time:	10:46		
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	80000	78100	97.6
Lead	anr		
Magnesium	anr		
Manganese	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Thallium	anr		
Vanadium	anr		
Zinc	anr		

(\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.4  
7

INITIAL LOW CALIBRATION CHECK STANDARD SUMMARY

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT Date Analyzed: 05/20/06 Methods: EPA 200.7, SW846 6010B  
 QC Limits: 50 to 150 % Recovery Run ID: MA17532 Units: ug/l

Sample ID:	Time: CRIB	10:52 CRIB1	10:57 CRIB2
Metal	True	Results % Rec	Results % Rec
Aluminum	400		
Antimony	12		
Arsenic	16		
Barium	400		
Beryllium	2.0		
Cadmium	8.0		
Calcium	5000		
Chromium	20		
Cobalt	100		
Copper	50		
Iron	200	296 148.0	
Lead	6.0		
Magnesium	5000		
Manganese	30		
Nickel	80		
Potassium	5000		
Selenium	20		
Silver	20		
Sodium	5000		
Thallium	20		
Vanadium	100		
Zinc	40		

(\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.5  
7

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
Part 1 - ICSA and ICSAB Standards

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT Date Analyzed: 05/20/06 Methods: EPA 200.7, SW846 6010B  
QC Limits: 80 to 120 % Recovery Run ID: MA17532 Units: ug/l

Time: Sample ID:	ICSAB True	ICSAB True	11: 24 ICSAB1 Results	% Rec	11: 29 ICSAB1 Results	% Rec	16: 30 ICSAB2 Results	% Rec	16: 35 ICSAB2 Results	% Rec
Aluminum	500000	500000	517000	103.4	526000	105.2	502000	100.4	507000	101.4
Antimony		1000	3.3		1080	108.0	1.4		1030	103.0
Arsenic		1000	0.92		1030	103.0	-1.5		996	99.6
Barium		500	-0.74		536	107.2	-1.2		507	101.4
Beryllium		500	0.13		505	101.0	0.0015		487	97.4
Cadmium		1000	1.5		1060	106.0	1.0		1010	101.0
Calcium	500000	500000	549000	109.8	558000	111.6	531000	106.2	537000	107.4
Chromium		500	1.0		493	98.6	2.1		474	94.8
Cobalt		500	-0.58		508	101.6	-0.74		487	97.4
Copper		500	0.72		559	111.8	1.2		525	105.0
Iron	200000	200000	201000	100.5	205000	102.5	195000	97.5	197000	98.5
Lead		1000	-0.43		1050	105.0	1.7		1010	101.0
Magnesium	500000	500000	535000	107.0	545000	109.0	519000	103.8	523000	104.6
Manganese		500	-1.7		513	102.6	-1.8		491	98.2
Nickel		1000	5.5		1060	106.0	6.9		1010	101.0
Potassium			16.1		-22		-25		-34	
Selenium		1000	-4.3		1110	111.0	1.6		1060	106.0
Silver		1000	0.53		1120	112.0	0.73		1060	106.0
Sodium			191		263		231		337	
Thallium		1000	0.11		1010	101.0	-2.9		958	95.8
Vanadium		500	0.017		527	105.4	-0.35		497	99.4
Zinc		1000	-1.1		1100	110.0	-2.0		1050	105.0

(\*) Outside of QC limits  
(anr) Analyte not requested

7.1.6  
7

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
Part 1 - ICSA and ICSAB Standards

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: IR0520M1.DAT Date Analyzed: 05/20/06 Methods: EPA 200.7, SW846 6010B  
QC Limits: 80 to 120 % Recovery Run ID: MA17532 Units: ug/l

Time: Sample ID:	ICSA True	ICSAB True	20:52 ICSA3 Results	% Rec	20:58 ICSAB3 Results	% Rec
Aluminum	500000	500000	520000	104.0	518000	103.6
Antimony		1000	0.085		1050	105.0
Arsenic		1000	-3.1		1030	103.0
Barium		500	-0.39		522	104.4
Beryllium		500	0.024		495	99.0
Cadmium		1000	2.1		1040	104.0
Calcium	500000	500000	528000	105.6	545000	109.0
Chromium		500	2.6		483	96.6
Cobalt		500	-1.1		497	99.4
Copper		500	2.2		548	109.6
Iron	200000	200000	196000	98.0	201000	100.5
Lead		1000	-1.8		1030	103.0
Magnesium	500000	500000	527000	105.4	534000	106.8
Manganese		500	-2.7		501	100.2
Nickel		1000	7.9		1040	104.0
Potassium			-11		-22	
Selenium		1000	-6.3		1090	109.0
Silver		1000	0.67		1080	108.0
Sodium			132		258	
Thallium		1000	-2.4		1010	101.0
Vanadium		500	-2.0		516	103.2
Zinc		1000	-1.1		1070	107.0

(\*) Outside of QC limits  
(anr) Analyte not requested

7.1.6  
7

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

QC Batch ID: MP34466  
Matrix Type: AQUEOUS

Methods: SW846 6010B  
Units: ug/l

Prep Date: 05/19/06

Metal	RL	IDL	MB raw	final
Aluminum	200	40	anr	
Antimony	6.0	5.1	anr	
Arsenic	8.0	4.4	anr	
Barium	200	1.1	anr	
Beryllium	1.0	.1	anr	
Cadmium	4.0	.6	anr	
Calcium	5000	42	anr	
Chromium	10	.7	anr	
Cobalt	50	.8	anr	
Copper	25	.9	anr	
Iron	100	41	38.1	<100
Lead	3.0	2.9	anr	
Magnesium	5000	20	anr	
Manganese	15	.2	anr	
Nickel	40	3.9	anr	
Potassium	5000	53	anr	
Selenium	10	3.6	anr	
Silver	10	.8	anr	
Sodium	5000	150	anr	
Thallium	10	6.6	anr	
Vanadium	50	1.2	anr	
Zinc	20	1.2	anr	

Associated samples MP34466: J30052-1, J30052-2, J30052-3, J30052-4

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

7.2.1  
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Log in Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

QC Batch ID: MP34466  
 Matrix Type: AQUEOUS

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 05/19/06

Metal	J30799-2 Original MS	Spike lot MPI RW1	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	2510	3800	1000	129.0N 75-125
Lead	anr			
Magnesium	anr			
Manganese	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Thallium	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP34466: J30052-1, J30052-2, J30052-3, J30052-4

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

7.2.2  
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Log in Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

QC Batch ID: MP34466  
 Matrix Type: AQUEOUS

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 05/19/06

Metal	J30799-2 Original	MSD	Spike lot MPI RW1	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	2510	3520	1000	101.0	7.7	20
Lead	anr					
Magnesium	anr					
Manganese	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Thallium	anr					
Vanadium	anr					
Zinc	anr					

Associated samples MP34466: J30052-1, J30052-2, J30052-3, J30052-4

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

7.2.2  
7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

QC Batch ID: MP34466  
 Matrix Type: AQUEOUS

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 05/19/06

Metal	LCS Result	Spike Lot MPLCW2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	5910	5500	107.5	80-120
Lead	anr			
Magnesium	anr			
Manganese	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Thallium	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP34466: J30052-1, J30052-2, J30052-3, J30052-4

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

7.2.3  
7

SERIAL DILUTION RESULTS SUMMARY

Log in Number: J30052  
 Account: ENSRNJ - ENSR Consulting & Engineering  
 Project: Ingersoll Rand, Phillipsburg, NJ

QC Batch ID: MP34466  
 Matrix Type: AQUEOUS

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 05/19/06

Metal	J30799-2 Original	SDL 1:5	RPD	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	2510	2750	9.7	0-10
Lead	anr			
Magnesium	anr			
Manganese	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Thallium	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP34466: J30052-1, J30052-2, J30052-3, J30052-4

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

7.2.4  
7



## General Chemistry

### QC Data Summaries

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**Includes the following where applicable:**

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Log in Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN90694	5.0	<5.0	mg/l	50.0	55.3	110.6	80-120%
Chloride	GP33571/GN91062	2.0	<2.0	mg/l	80	76.3	95.4	90-110%
Fluoride	GP33571/GN91062	0.10	<0.10	mg/l	2	1.91	95.5	90-110%
Iron, Ferrous	GN90612	0.20	<0.20	mg/l				
Nitrogen, Ammonia	GP33556/GN91095	0.10	<0.10	mg/l				
Nitrogen, Ammonia	GP33556/GN91095	0.10	<0.10	mg/l	1	1.03	103.0	80-120%
Nitrogen, Ammonia	GP33556/GN91095			mg/l	1	1.19	119.0	80-120%
Nitrogen, Nitrate + Nitrite	GP33562/GN91059	0.10	<0.10	mg/l	2	1.90	95.0	80-120%
Nitrogen, Nitrite	GN90583	0.010	<0.010	mg/l	0.040	0.039	97.5	90-110%
Plate Count, Total	MB2903	0	0	CFU/ml				
Sulfate	GP33571/GN91062	2.0	<2.0	mg/l	80	76.5	95.6	90-110%
Sulfide	GN90779	2.0	<2.0	mg/l	4.6	4.5	97.8	80-120%

Associated Samples:

Batch GN90583: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GN90612: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GN90694: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GN90779: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GP33556: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GP33562: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GP33571: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch MB2903: J30052-1, J30052-2, J30052-3, J30052-4



DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN90694	J30154-2	mg/l	53.6	54.1	0.9	0-10%
Chloride	GP33571/GN91107	J30351-1	mg/l	690	689	0.1	0-20%
Fluoride	GP33571/GN91107	J30351-1	mg/l	0.50	0.54	7.7	0-20%
Iron, Ferrous	GN90612	J30029-5	mg/l	<0.20	<0.20	0.0	0-10%
Nitrogen, Ammonia	GP33556/GN91095	J29324-1	mg/l	<0.10	<0.10	89.8(a)	0-24%
Nitrogen, Nitrate + Nitrite	GP33562/GN91059	J30029-1	mg/l	<0.10	<0.10	0.0	0-12%
Nitrogen, Nitrite	GN90583	J30029-6	mg/l	<0.010	<0.010	0.0	0-10%
Plate Count, Total	MB2903	J30017-1	CFU/ml	0	0	0.0	0-22%
Sulfate	GP33571/GN91062	J30351-1	mg/l	4.8	6.0	22.2(a)	0-20%
Sulfate	GP33571/GN91062	J30351-1	mg/l	<10	6.0	22.2(a)	0-20%
Sulfide	GN90779	J30126-1	mg/l	<2.0	<2.0	0.0	0-10%

Associated Samples:

- Batch GN90583: J30052-1, J30052-2, J30052-3, J30052-4
- Batch GN90612: J30052-1, J30052-2, J30052-3, J30052-4
- Batch GN90694: J30052-1, J30052-2, J30052-3, J30052-4
- Batch GN90779: J30052-1, J30052-2, J30052-3, J30052-4
- Batch GP33556: J30052-1, J30052-2, J30052-3, J30052-4
- Batch GP33562: J30052-1, J30052-2, J30052-3, J30052-4
- Batch GP33571: J30052-1, J30052-2, J30052-3, J30052-4
- Batch MB2903: J30052-1, J30052-2, J30052-3, J30052-4

(a) RPD acceptable due to low duplicate and sample concentrations.

8.2  
8

MATRIX SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Log in Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP33571/GN91107	J30351-1	mg/l	690	400	1060	92.5	80-120%
Fluoride	GP33571/GN91107	J30351-1	mg/l	0.50	10	10.2	97.0	80-120%
Nitrogen, Ammonia	GP33556/GN91095	J29324-1	mg/l	<0.10	1	1.1	106.5	62-132%
Nitrogen, Nitrate + Nitrite	GP33562/GN91059	J30029-1	mg/l	<0.10	2	2.1	105.0	64-132%
Nitrogen, Nitrite	GN90583	J30029-6	mg/l	<0.010	0.040	0.040	100.0	71-121%
Sulfate	GP33571/GN91062	J30351-1	mg/l	4.8	80	81.7	96.1	80-120%
Sulfate	GP33571/GN91062	J30351-1	mg/l	<10	80	81.7	96.1	80-120%
Sulfide	GN90779	J30126-2	mg/l	<2.0	3.17	2.5	78.9	63-121%

Associated Samples:

Batch GN90583: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GN90779: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GP33556: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GP33562: J30052-1, J30052-2, J30052-3, J30052-4  
 Batch GP33571: J30052-1, J30052-2, J30052-3, J30052-4



Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: C052206W1.N03.CSV      Date Analyzed: 05/22/06      Methods: EPA 353.2  
Analyst: LE      Run ID: GN91059  
Parameters: Nitrogen, Nitrate + Nitrite

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:35	GN91059-STD1	1		STDA
12:36	GN91059-STD2	1		STDB
12:37	GN91059-STD3	1		STDC
12:38	GN91059-STD4	1		STDD
12:39	GN91059-STD5	1		STDE
12:40	GN91059-STD6	1		STDF
12:41	GN91059-STD7	1		STDG
12:43	GN91059-ICV1	1		
12:44	GN91059-ICB1	1		
12:45	GN91059-CCV1	1		
12:45	GN91059-CCB1	1		
12:46	GP33561-MB1	1		
12:47	GP33561-B1	1		
12:48	GP33561-S1	1		
12:49	GP33561-D1	1		
12:50	J30799-2	1		(sample used for QC only; not part of login J30052)
12:51	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:53	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:55	ZZZZZZ	1		
12:56	GN91059-CCV2	1		
12:57	GN91059-CCB2	1		
12:58	ZZZZZZ	1		
12:59	ZZZZZZ	1		
13:00	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:03	ZZZZZZ	1		
13:04	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:06	ZZZZZZ	1		
13:07	ZZZZZZ	1		

8.4  
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Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: C052206W1.N03.CSV Date Analyzed: 05/22/06 Methods: EPA 353.2  
Analyst: LE Run ID: GN91059  
Parameters: Nitrogen, Nitrate + Nitrite

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:08	GN91059-CCV3	1		CCV fails; see rerun of associated brackets
13:09	GN91059-CCB3	1		
13:10	ZZZZZZ	1		
13:11	ZZZZZZ	1		
13:12	ZZZZZZ	1		
13:13	ZZZZZZ	1		
13:14	GP33562-MB1	1		
13:15	GP33562-B1	1		
13:15	GP33562-S1	1		
13:16	GP33562-D1	1		
13:17	J30029-1	1		(sample used for QC only; not part of login J30052)
13:18	ZZZZZZ	1		
13:19	GN91059-CCV4	1		
13:20	GN91059-CCB4	1		
13:21	ZZZZZZ	1		
13:22	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:26	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:28	ZZZZZZ	1		
13:29	J30052-1	1		
13:30	J30052-2	1		
13:31	GN91059-CCV5	1		
13:32	GN91059-CCB5	1		
13:33	J30052-3	1		
13:34	J30052-4	1		
13:35	ZZZZZZ	1		
13:36	ZZZZZZ	1		
13:37	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:39	ZZZZZZ	1		

8.4  
8

Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: C052206W1.N03.CSV Date Analyzed: 05/22/06 Methods: EPA 353.2  
Analyst: LE Run ID: GN91059  
Parameters: Nitrogen, Nitrate + Nitrite

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:40	GN91059-CCV6	1		
13:41	GN91059-CCB6	1		
13:48	GN91059-CCV7	1		
13:49	GN91059-CCB7	1		
13:50	ZZZZZZ	1		
13:51	ZZZZZZ	1		
13:52	ZZZZZZ	1		
13:53	ZZZZZZ	1		
13:54	ZZZZZZ	1		
13:55	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:57	ZZZZZZ	1		
13:58	ZZZZZZ	1		
13:59	ZZZZZZ	1		
14:00	GN91059-CCV8	1		
14:01	GN91059-CCB8	1		
14:02	ZZZZZZ	1		
14:03	ZZZZZZ	1		
14:04	ZZZZZZ	1		
14:05	ZZZZZZ	1		
14:06	GP33562-MB1	1		
14:07	GP33562-B1	1		
14:08	GP33562-S1	1		
14:09	GP33562-D1	1		
14:10	J30029-1	1		(sample used for QC only; not part of login J30052)
14:10	ZZZZZZ	1		
14:11	GN91059-CCV9	1		
14:12	GN91059-CCB9	1		
14:13	ZZZZZZ	3		
14:14	GN91059-CCV10	1		
14:15	GN91059-CCB10	1		

Refer to raw data for calibration curve and standards.

8.4  
8

Instrument QC Summary  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: C052206W1.N03.CSV

Date Analyzed: 05/22/06  
Run ID: GN91059

Methods: EPA 353.2  
Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN91059-ICV1	Nitrogen, Nitrate + Nitrite	2.0	0.10	0.0040	2	100.0	90-110
GN91059-ICB1	Nitrogen, Nitrate + Nitrite	-0.054	0.10	0.0040			
GN91059-CCV1	Nitrogen, Nitrate + Nitrite	2.6	0.10	0.0040	2.5	104.0	90-110
GN91059-CCB1	Nitrogen, Nitrate + Nitrite	-0.060	0.10	0.0040			
GN91059-CCV2	Nitrogen, Nitrate + Nitrite	2.5	0.10	0.0040	2.5	100.0	90-110
GN91059-CCB2	Nitrogen, Nitrate + Nitrite	-0.058	0.10	0.0040			
GN91059-CCV3	Nitrogen, Nitrate + Nitrite	2.2	0.10	0.0040	2.5	88.0! (a)	90-110
GN91059-CCB3	Nitrogen, Nitrate + Nitrite	-0.061	0.10	0.0040			
GN91059-CCV4	Nitrogen, Nitrate + Nitrite	2.5	0.10	0.0040	2.5	100.0	90-110
GN91059-CCB4	Nitrogen, Nitrate + Nitrite	-0.070	0.10	0.0040			
GN91059-CCV5	Nitrogen, Nitrate + Nitrite	2.6	0.10	0.0040	2.5	104.0	90-110
GN91059-CCB5	Nitrogen, Nitrate + Nitrite	-0.061	0.10	0.0040			
GN91059-CCV6	Nitrogen, Nitrate + Nitrite	2.6	0.10	0.0040	2.5	104.0	90-110
GN91059-CCB6	Nitrogen, Nitrate + Nitrite	-0.062	0.10	0.0040			
GN91059-CCV7	Nitrogen, Nitrate + Nitrite	2.6	0.10	0.0040	2.5	104.0	90-110
GN91059-CCB7	Nitrogen, Nitrate + Nitrite	-0.033	0.10	0.0040			
GN91059-CCV8	Nitrogen, Nitrate + Nitrite	2.3	0.10	0.0040	2.5	92.0	90-110
GN91059-CCB8	Nitrogen, Nitrate + Nitrite	-0.051	0.10	0.0040			
GN91059-CCV9	Nitrogen, Nitrate + Nitrite	2.6	0.10	0.0040	2.5	104.0	90-110
GN91059-CCB9	Nitrogen, Nitrate + Nitrite	-0.067	0.10	0.0040			
GN91059-CCV10	Nitrogen, Nitrate + Nitrite	2.6	0.10	0.0040	2.5	104.0	90-110
GN91059-CCB10	Nitrogen, Nitrate + Nitrite	-0.067	0.10	0.0040			

(!) Outside of QC limits

(a) No samples reported for this test in the area associated with this QC.

8.4

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Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 206052201.TXT      Date Analyzed: 05/22/06      Methods: EPA 300/SW846 9056  
Analyst: JH      Run ID: GN91062  
Parameters: Chloride, Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:10	GN91062-STD1	1		STDA
10:28	GN91062-STD2	1		STDB
10:47	GN91062-STD3	1		STDC
11:05	GN91062-STD4	1		STDD
11:24	GN91062-STD5	1		STDE
11:42	GN91062-STD6	1		STDF
12:00	GN91062-STD7	1		Manually integrated chrom. peaks reviewed and verified to comply with criteria of Accutest SOP EQA044.
11:25	GN91062-ICV1	1		
11:44	GN91062-CCV1	1		
12:02	GN91062-CCB1	1		
12:20	GP33539-MB3	1		
12:39	GP33539-B3	1		
12:57	ZZZZZ	5		
13:16	ZZZZZ	10		
13:34	GN91062-CCV2	1		
13:52	GN91062-CCB2	1		
15:13	GP33570-MB1	1		
15:31	GP33570-B1	1		
15:50	GP33570-S1	1		
16:08	GP33570-D1	1		
16:27	J30029-1	1		(sample used for QC only; not part of login J30052)
16:45	ZZZZZ	1		
17:03	ZZZZZ	1		
17:22	ZZZZZ	1		
17:40	ZZZZZ	1		
17:59	ZZZZZ	1		
18:17	GN91062-CCV3	1		
18:35	GN91062-CCB3	1		
18:54	ZZZZZ	1		
19:12	ZZZZZ	1		
19:31	ZZZZZ	1		
19:49	ZZZZZ	1		
20:07	ZZZZZ	1		

8.5  
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Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 206052201.TXT Date Analyzed: 05/22/06 Methods: EPA 300/SW846 9056  
Analyst: JH Run ID: GN91062  
Parameters: Chloride, Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:26	ZZZZZZ	1		
20:44	ZZZZZZ	1		
21:03	ZZZZZZ	1		
21:21	ZZZZZZ	1		
21:39	ZZZZZZ	1		
21:58	GN91062-CCV4	1		
22:16	GN91062-CCB4	1		
22:35	ZZZZZZ	1		
22:53	ZZZZZZ	1		
23:12	ZZZZZZ	1		
23:30	GP33571-MB1	1		
23:48	GP33571-B1	1		
00:07	GP33571-S1	1		redo chl , f @ 1:5, report so4
00:25	GP33571-D1	1		redo chl , f @ 1:5, report so4
00:44	J30351-1	1		(sample used for QC only; not part of login J30052)
01:02	ZZZZZZ	1		
01:20	ZZZZZZ	1		
01:39	GN91062-CCV5	1		
01:57	GN91062-CCB5	1		
02:16	ZZZZZZ	1		
02:34	ZZZZZZ	1		
02:52	J30052-1	1		
03:11	J30052-2	1		
03:29	J30052-3	1		
03:48	J30052-4	1		
04:06	ZZZZZZ	1		
04:24	ZZZZZZ	1		
04:43	ZZZZZZ	1		
05:01	ZZZZZZ	1		
05:20	GN91062-CCV6	1		
05:38	GN91062-CCB6	1		
05:56	ZZZZZZ	1		
06:15	ZZZZZZ	1		

8.5  
8

Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 206052201.TXT      Date Analyzed: 05/22/06      Methods: EPA 300/SW846 9056  
Analyst: JH      Run ID: GN91062  
Parameters: Chloride, Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
06:33	ZZZZZ	1		
06:52	ZZZZZ	1		
07:10	ZZZZZ	1		
07:28	ZZZZZ	1		
07:47	GN91062-CCV7	1		
08:05	GN91062-CCB7	1		

Refer to raw data for calibration curve and standards.

8.5  
8

Instrument QC Summary  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 206052201.TXT

Date Analyzed: 05/22/06  
Run ID: GN91062

Methods: EPA 300/SW846 9056  
Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN91062-ICV1	Chloride	105	2.0	0.052	104.64	100.3	90-110
GN91062-ICV1	Sulfate	110	2.0	0.041	108.92	101.0	90-110
GN91062-CCV1	Chloride	201	2.0	0.052	200	100.5	90-110
GN91062-CCV1	Sulfate	201	2.0	0.041	200	100.5	90-110
GN91062-CCB1	Chloride	0.10	2.0	0.052			
GN91062-CCB1	Sulfate	0.22	2.0	0.041			
GN91062-CCV2	Chloride	201	2.0	0.052	200	100.5	90-110
GN91062-CCV2	Sulfate	202	2.0	0.041	200	101.0	90-110
GN91062-CCB2	Chloride	0.085	2.0	0.052			
GN91062-CCB2	Sulfate	0.20	2.0	0.041			
GN91062-CCV3	Chloride	202	2.0	0.052	200	101.0	90-110
GN91062-CCV3	Sulfate	202	2.0	0.041	200	101.0	90-110
GN91062-CCB3	Chloride	1.2	2.0	0.052			
GN91062-CCB3	Sulfate	0.45	2.0	0.041			
GN91062-CCV4	Chloride	203	2.0	0.052	200	101.5	90-110
GN91062-CCV4	Sulfate	202	2.0	0.041	200	101.0	90-110
GN91062-CCB4	Chloride	0.91	2.0	0.052			
GN91062-CCB4	Sulfate	0.34	2.0	0.041			
GN91062-CCV5	Chloride	203	2.0	0.052	200	101.5	90-110
GN91062-CCV5	Sulfate	202	2.0	0.041	200	101.0	90-110
GN91062-CCB5	Chloride	1.99	2.0	0.052			
GN91062-CCB5	Sulfate	0.18	2.0	0.041			
GN91062-CCV6	Chloride	202	2.0	0.052	200	101.0	90-110
GN91062-CCV6	Sulfate	202	2.0	0.041	200	101.0	90-110
GN91062-CCB6	Chloride	0.67	2.0	0.052			
GN91062-CCB6	Sulfate	0.38	2.0	0.041			
GN91062-CCV7	Chloride	203	2.0	0.052	200	101.5	90-110
GN91062-CCV7	Sulfate	202	2.0	0.041	200	101.0	90-110
GN91062-CCB7	Chloride	1.0	2.0	0.052			
GN91062-CCB7	Sulfate	0.45	2.0	0.041			

(!) Outside of QC Limits

8.5  
8

Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 0523AMN2.TXT                      Date Analyzed: 05/23/06                      Methods: EPA 350.1  
Analyst: NR                                      Run ID: GN91095  
Parameters: Nitrogen, Ammonia

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:35	GN91095-STD1	1		STDA
12:35	GN91095-STD2	1		STDB
12:36	GN91095-STD3	1		STDC
12:37	GN91095-STD4	1		STDD
12:37	GN91095-STD5	1		STDE
12:38	GN91095-STD6	1		STDF
12:38	GN91095-STD7	1		STDG
12:41	GN91095-ICV1	1		
12:42	GN91095-ICB1	1		
12:42	GN91095-CCV1	1		
12:43	GN91095-CCB1	1		
12:44	GP33556-MB1	1		
12:44	GP33556-B1	1		rerun for conf
12:45	GP33556-D1	1		
12:45	GP33556-S1	1		
12:46	J29324-1	1		(sample used for QC only; not part of login J30052)
12:47	ZZZZZZ	1		
12:47	ZZZZZZ	1		
12:48	ZZZZZZ	1		
12:48	J30052-2	1		
12:49	ZZZZZZ	1		
12:50	GN91095-CCV2	1		
12:50	GN91095-CCB2	1		
12:51	ZZZZZZ	1		
12:51	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:53	GP33556-MB2	1		
12:53	GP33556-B2	1		
12:54	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:55	J30052-1	1		rerun b/c carry over
12:55	J30052-3	1		
12:56	J30052-4	1		

8.8

Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 0523AMN2.TXT Date Analyzed: 05/23/06 Methods: EPA 350.1  
Analyst: NR Run ID: GN91095  
Parameters: Nitrogen, Ammonia

Time	Sample Description	Dilution Factor	PS Recov	Comments
12: 57	GN91095-CCV3	1		
12: 57	GN91095-CCB3	1		
12: 58	ZZZZZZ	1		
12: 58	ZZZZZZ	1		
12: 59	GN91095-CCV4	1		
13: 00	GN91095-CCB4	1		
13: 18	GN91095-CCV5	1		
13: 19	GN91095-CCB5	1		
13: 20	GP33556-B1	1		
13: 20	ZZZZZZ	1		
13: 21	ZZZZZZ	20		
13: 21	ZZZZZZ	40		
13: 22	J30052-1	1		
13: 23	ZZZZZZ	20		
13: 23	ZZZZZZ	40		
13: 24	ZZZZZZ	20		
13: 24	ZZZZZZ	40		
13: 25	GN91095-CCV6	1		
13: 26	GN91095-CCB6	1		
13: 36	GN91095-CCV7	1		
13: 36	GN91095-CCB7	1		
13: 37	ZZZZZZ	20		
13: 38	ZZZZZZ	40		
13: 38	ZZZZZZ	80		
13: 39	ZZZZZZ	200		
13: 39	GN91095-CCV8	1		
13: 40	GN91095-CCB8	1		
13: 43	GN91095-CCV9	1		
13: 43	GN91095-CCB9	1		
13: 44	ZZZZZZ	200		
13: 45	GN91095-CCV10	1		
13: 45	GN91095-CCB10	1		

Refer to raw data for calibration curve and standards.

8.8

Instrument QC Summary  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 0523AMN2.TXT

Date Analyzed: 05/23/06  
Run ID: GN91095

Methods: EPA 350.1  
Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN91095-ICV1	Nitrogen, Ammonia	1.5	0.10	0.026	1.5	100.0	90-110
GN91095-ICB1	Nitrogen, Ammonia	-0.066	0.10	0.026			
GN91095-CCV1	Nitrogen, Ammonia	1.5	0.10	0.026	1.5	100.0	90-110
GN91095-CCB1	Nitrogen, Ammonia	-0.068	0.10	0.026			
GN91095-CCV2	Nitrogen, Ammonia	1.5	0.10	0.026	1.5	100.0	90-110
GN91095-CCB2	Nitrogen, Ammonia	-0.069	0.10	0.026			
GN91095-CCV3	Nitrogen, Ammonia	1.5	0.10	0.026	1.5	100.0	90-110
GN91095-CCB3	Nitrogen, Ammonia	-0.048	0.10	0.026			
GN91095-CCV4	Nitrogen, Ammonia	2.0	0.10	0.026	1.5	133.3! (a)	90-110
GN91095-CCB4	Nitrogen, Ammonia	0.13 *(a)	0.10	0.026			
GN91095-CCV5	Nitrogen, Ammonia	1.4	0.10	0.026	1.5	93.3	90-110
GN91095-CCB5	Nitrogen, Ammonia	-0.067	0.10	0.026			
GN91095-CCV6	Nitrogen, Ammonia	1.5	0.10	0.026	1.5	100.0	90-110
GN91095-CCB6	Nitrogen, Ammonia	-0.046	0.10	0.026			
GN91095-CCV7	Nitrogen, Ammonia	1.5	0.10	0.026	1.5	100.0	90-110
GN91095-CCB7	Nitrogen, Ammonia	-0.066	0.10	0.026			
GN91095-CCV8	Nitrogen, Ammonia	1.4	0.10	0.026	1.5	93.3	90-110
GN91095-CCB8	Nitrogen, Ammonia	-0.058	0.10	0.026			
GN91095-CCV9	Nitrogen, Ammonia	1.4	0.10	0.026	1.5	93.3	90-110
GN91095-CCB9	Nitrogen, Ammonia	-0.067	0.10	0.026			
GN91095-CCV10	Nitrogen, Ammonia	1.4	0.10	0.026	1.5	93.3	90-110
GN91095-CCB10	Nitrogen, Ammonia	0.026 U	0.10	0.026			

(!) Outside of QC limits

(a) No samples reported for this test in the area associated with this QC.

Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 206052301.TXT  
Analyst: JH  
Parameters: Chloride

Date Analyzed: 05/23/06      Methods: EPA 300/SW846 9056  
Run ID: GN91107

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:39	GN91107-STD1	1		STDA
10:58	GN91107-STD2	1		STDB
11:16	GN91107-STD3	1		STDC
11:34	GN91107-STD4	1		STDD
11:53	GN91107-STD5	1		STDE
12:11	GN91107-STD6	1		STDF
12:30	GN91107-STD7	1		STDG
12:48	GN91107-STD8	1		Manually integrated chrom. peaks reviewed and verified to comply with criteria of Accutest SOP EQA044.
13:06	GN91107-STD9	1		Manually integrated chrom. peaks reviewed and verified to comply with criteria of Accutest SOP EQA044.
13:25	GN91107-ICV1	1		
13:43	GN91107-CCV1	1		
14:02	GN91107-CCB1	1		
14:20	GP33570-MB2	1		
14:20	GP33571-MB2	1		Sample shown for QC tracking purposes only.
14:20	GP33514-MB2	1		Sample shown for QC tracking purposes only.
14:38	GP33570-B2	1		
14:38	GP33571-B2	1		Sample shown for QC tracking purposes only.
14:38	GP33514-B2	1		Sample shown for QC tracking purposes only.
14:57	ZZZZZ	5		
15:15	ZZZZZ	4		
15:34	ZZZZZ	5		
15:52	ZZZZZ	10		
16:10	J30351-1	5		(sample used for QC only; not part of login J30052)
16:29	GP33571-D1	5		
16:47	GP33571-S1	5		
17:06	ZZZZZ	1		
17:24	GN91107-CCV2	1		
17:42	GN91107-CCB2	1		
18:01	ZZZZZ	1		
18:19	M56235-1	1		(sample used for QC only; not part of login J30052)
18:38	GP33514-D1	1		
18:56	GP33514-S1	1		
19:15	GP33587-MB1	1		

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Accutest Laboratories Instrument Runlog  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 206052301.TXT  
Analyst: JH  
Parameters: Chloride

Date Analyzed: 05/23/06      Methods: EPA 300/SW846 9056  
Run ID: GN91107

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:33	GP33587-B1	1		
19:51	GP33587-S1	1		
20:10	GP33587-D1	1		
20:28	J30154-1	1		(sample used for QC only; not part of login J30052)
20:47	ZZZZZZ	1		
21:05	GN91107-CCV3	1		
21:23	GN91107-CCB3	1		
21:42	ZZZZZZ	1		
22:00	ZZZZZZ	1		
22:19	ZZZZZZ	1		
22:37	ZZZZZZ	1		
22:55	ZZZZZZ	1		
23:14	ZZZZZZ	1		
23:32	ZZZZZZ	1		
23:51	ZZZZZZ	1		
00:09	ZZZZZZ	1		
00:27	ZZZZZZ	1		
00:46	GN91107-CCV4	1		
01:04	GN91107-CCB4	1		
01:23	ZZZZZZ	1		
01:41	ZZZZZZ	1		
01:59	ZZZZZZ	1		
02:18	ZZZZZZ	1		
02:36	ZZZZZZ	1		
02:55	ZZZZZZ	1		
03:13	ZZZZZZ	1		
03:31	ZZZZZZ	1		
03:50	GN91107-CCV5	1		
04:08	GN91107-CCB5	1		

Refer to raw data for calibration curve and standards.

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Instrument QC Summary  
Inorganics Analyses

Login Number: J30052  
Account: ENSRNJ - ENSR Consulting & Engineering  
Project: Ingersoll Rand, Phillipsburg, NJ

File ID: 206052301.TXT

Date Analyzed: 05/23/06  
Run ID: GN91107

Methods: EPA 300/SW846 9056  
Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN91107-ICV1	Chloride	105	2.0	0.052	104.64	100.3	90-110
GN91107-CCV1	Chloride	201	2.0	0.052	200	100.5	90-110
GN91107-CCB1	Chloride	0.37	2.0	0.052			
GN91107-CCV2	Chloride	201	2.0	0.052	200	100.5	90-110
GN91107-CCB2	Chloride	0.37	2.0	0.052			
GN91107-CCV3	Chloride	202	2.0	0.052	200	101.0	90-110
GN91107-CCB3	Chloride	0.62	2.0	0.052			
GN91107-CCV4	Chloride	202	2.0	0.052	200	101.0	90-110
GN91107-CCB4	Chloride	0.62	2.0	0.052			
GN91107-CCV5	Chloride	194	2.0	0.052	200	97.0	90-110
GN91107-CCB5	Chloride	0.57	2.0	0.052			

(!) Outside of QC Limits

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